# Richard M. Levy, M.Arch, PhD, RPP, MCIP

Professor of Urban Planning and Design Adjunct Professor, Department of Computer Science Faculty of Environmental Design The University of Calgary 2500 University Dr. NW Calgary, Alberta, Canada T2N 1N4

## Phone/Fax/Email/http

Off: (403) 220-3633 Home: (403) 949-2051 Fax: (403) 284-4399 Cell: (403) 701-3391 EMAIL: rmlevy@ucalgary.ca http://evds.ucalgary.ca/profiles/richard-levy

## Citizenship

USA and Canada

## EDUCATION

PhD	Area of Concentration: Architectural History School of Architecture University of California, Berkeley, 1980
M.Arch.	Area of Concentration: Design School of Architecture University of California, Berkeley,1975
BSCE	Area of Concentration: Structural Engineering College of Engineering Tufts University Medford Massachusetts, (Tau Beta Pi) 1972

#### **PROFESSIONAL ASSOCIATIONS**

Alberta Association Canadian Institute of Planners American Institute of Architects Canadian Institute of Planners Computer Applications and Quantitative Methods in Archaeology Serious Games Association, Canada SIGGRAPH Society for American Archaeology

## **EMPLOYMENT SUMMARY**

1992-	Professor of Planning and Urbanism, Planning Program, Director of Computing, Co-Coordinator, Computational Media Design Program, Faculty of Environmenta Design, University of Calgary, Alberta, Canada.	
1991-92	Executive Director Business Improvement District, Geneva, NY.	
1991-92	Planner RFL Architects, P.C. Rochester, NY.	
1991-92	Assistant Professor, Department of Art, Hobart and William Smith Colleges, Geneva, New York.	
1989-91	Planning Consultant, Geneva, New York.	
1987-88	Assistant Dean, Graduate School Cornell University, Ithaca, New York.	
1985	Lecturer, Department of Art Hobart and William Smith Colleges, Geneva, New York.	
1985	Visiting Scholar, Department of City and Regional Planning, Cornell University, Ithaca, New York.	
1984	Visiting Assistant Professor, Department of Architecture Cornell University, Ithaca, New York.	
1983	Postdoctoral Fellow, Department of Social Science, Carnegie-Mellon University, Pittsburgh, Pennsylvania.	
1980-83	Visiting Assistant Professor, School of Architecture, Rensselaer Polytechnic Institute, Troy New York.	
1980	Postdoctoral Fellow, National Museum of History and Technology, Smithsonian Institution, Washington, D.C.	
1978-79	Lecturer, Department of History, University of California, Los Angeles.	
1973	Assistant Town Engineer, Martinez California.	

### **GRANTS AND FELLOWSHIPS**

- 2015 Research Incubation Support Grant, Faculty of Environmental Design, 4000.
- 2015 UCRG, Travel Funds, University of Calgary, Award \$1800.
- 2013 Virtual Museum of Canada Research Grant. Science and Survival at Fort Conger, An Historic Research Base in the Canadian High Arctic, Peter Dawson, PI, Richard Levy, Co-PI, \$197,000.
- 2013 Enhancing Policing: Officer Training and Community Education via Modifiable Digital Games, Simulations and New Media Technology, SSHRC Partnership Development Grant (Insight) Jerremie Clyde, PI, Akyol Zehra, Co-Applicant, Richard M. Levy, Co-Applicant, Tony Tang, Co-Investigator, Larry Katz, Co-Applicant, Jeff Boyd, Collaborator, Karly Royle, Co-Applicant, Martian Wright, Co-Applicant. Award \$200,000 aprox.
- 2010-11 Parks Canada, Reconstructing Fort Conger in Virtual Reality in Fort Conger, Quttinirpaaq National Park; Richard M. Levy, PI, Peter Dawson, Co-PI, \$68,333.
- Home, Hearth, and Household in the Circumpolar North, BOREAS, SHRRC David Anderson (Project Leader Norway) University of Tromsø, Per Axelsson (Principal Investigator Sweden) Umeå University, Sweden Peter Dawson (Principal Investigator Canada) University of Calgary John Ziker (Principal Investigator USA) Boise State University, Ivar Bjorklund (Co-Investigator Norway) Tromsø Museum, Norway, Bjornar Olsen (Co-Investigator Norway) University of Tromsø, Norway ,Gary Oetelaar (Co-Investigator Canada) University of Calgary, Canada, Charles Arnold (Co-Investigator Canada) University of Calgary, Canada, Richard M. Levy (Participant Canada), \$634,000 Euros.
- 2009 Virtual Museum of Canada Research Grant: The Thule Whalebone House an Online Virtual World. Held jointly with the Glenbow Museum (\$65,000.00).
- 2007-8 Canadian Council on Learning, A Study of Classroom Use of Games and Simulations, Project Team, Kathy Sanford Associate Professor Faculty of Education. Richard M. Levy, Faculty of Environmental Design, \$75,000.
- 2006-8 Canadian Council on Learning, A Study of Classroom Use of Educational Games and Simulations for Literacy Skills Development, Project Team, Ron Owston, Jenifer Johnson, Herb Wideman, Markgot Kaszap, Richard Levy, Michael Magee, \$75,000.
- 2006 Asian Pacific Fund, Design as Gateway: Enabling Innovation in Canada's Asia-Pacific Gateway & Corridor, David Covo, Richard Levy, Douglas Macleod and Larissa Muller, \$15,000.
- 2006 NCE, National Centre of Excellence, Canadian Design Research Network

	Partners: University of British Columbia, University of Calgary, McGill University, Nova Scotia College of Art and Design, Ontario College of Art and Design, Ryerson University, Simon Fraser University, University of Alberta, Universite Laval, University of Manitoba, University of Toronto and the University of Waterloo.
2005	Alberta Real Estate Foundation, Grant to support the creation of a Certificate Program in real estate development and finance, \$30,000.
2005	UCRG, Travel Funds, University of Calgary, Award \$1500.
2004	MediaLightPath, Canarie, Researchers: Levy, R. (Team Leader), Karen Andrews, P. Bernard, S. Dineee, D. MacLeod, D. Mercer, G. Paquette, B. Pendergast, J. Roy, S. Varnhagen, T. Woods, \$940,000.
2003	The 3D Web Research Network: Submission, Canadian Heritage New Media Research Networks Fund, Douglas MacLeod, Project Leader, NETERA, Researchers: Levy, R., Wyvil, B., Boulanger, P., Wright, R., Knowledge Media Design Institute, \$2,000,000.
2003	Canada Lands Corporation, Grant to support graduate research in urban planning and real estate development, \$15,000.
2003	WestGrid, Canadian Foundation for Innovation, (CFI) Collaborative Visualization Research University of Calgary. Component. Project Team: Katz, L., Levy, R., Chang, E., Mattson, M., & Mitchell, D. (2002), \$150,000
2002	Learning Commons Fellowship, Thule whale bone house: A virtual environment for exploring time and place, \$15,000.
2002	Office of the Vice President Research, Chang, E., Katz, L., Levy, R, Parker, J. and, Kopp G. Effective Virtual Environments in Human Performance Sport and Fitness, \$10,000.
2002	ICORE Chair Recruitment Grant, Katz,L. J. Caird, S. Carpendale, S. Greenberg, G. Kopp, R. Levy, R., Morey-Sorrentino, B. Wyvill \$10,000.
2002	MACI, Multimedia Advanced Computing Infrastructure, Douglas MacLeod, Project Leader, NETERA, Researchers: Levy, R., Wyvil, B, Unger, B. \$1,500,000.
2002	UCRG, Travel Funds, University of Calgary, Award \$1500.
2002	University of Calgary, An Augmented Reality System for Physical Examination training, \$6000.
2001	SMED International, Virtual Cities Project, Equipment Grant, award value \$225,000.

2001	Olympic Oval Foundation, Virtual Reality Speed Skating Simulator, Ruth Morey Sorrentino, Richard Levy and Larry Katz \$16,300.
2000	Alberta Real Estate Foundation, award \$10,000.
1999	UCRG, Travel Funds, University of Calgary, Award \$1350.
1998	Legacy 2005 in conjunction with Doug MacLeod, Wurcnet, The University of Calgary, Award \$30,000.
1998	An Instructional Video for the Fish Creek Archaeological Project, New Media Grant, The University of Calgary, \$2300.
1997	Legacy 2005 in conjunction with Doug MacLeod, Wurcnet, The University of Calgary, Award \$80,000.
1996	UCRG, Travel Funds, University of Calgary, Award \$1350.
1996	Canada Mortgage and Housing Corporation, Ottawa, Application of Virtual Reality to the Flex-Housing Design Competition, in conjunction with Douglas MacLeod and Barry Pendergast, award \$15,000.
1995	AGRA Earth & Environmental Limited, Calgary, Alberta, GIS and Oil and Gas Pipeline Feasibility Modeling, award \$21,000.
1995	Canadian Pacific Railway, Images for a Training Manual, Calgary, award \$2250.
1994-95	University of Calgary, Start-up Grant, Design of a 3D GIS Prototype for Exploring Public-Private Initiatives in Urban Development, award \$6500.
1993-94	Carma Ltd, Calgary, Alberta, Grant for the Study of Computer Visualization Techniques in Residential Development Decision Making, award \$14,500.
1993	ESRI Foundation, Redmond, California, GIS Software Development Grant, award value \$8000.
1992	Urban Development Corporation, Commercial Revitalization Grant for Facade Improvements, Business Improvement District, Geneva NY, award \$225,000.
1991	J.M. Kaplan Fund, Design Study Grant BID, Geneva, NY, award \$18,000.
1983	Mellon Postdoctoral Fellowship in Technology and Society, Carnegie Mellon University, Pittsburgh, PA.
1980	Smithsonian Institution Postdoctoral Fellowship Washington, D.C.
1978	Educational Institution Media Grant, award \$1500 University of California, Los Angeles.

## AWARDS AND HONORS

- 2016 Great Supervisor Award, University of Calgary
- 2015 Nominated for the University of Calgary Teaching Award
- 2013 EVDS Award for Teaching Excellence
- 2013 Nominated for the GSA, University of Calgary Teaching Award
- 2001 Honorable Mention, "Computer Reconstruction: Temple Site at Phimai", CAD and the Art of Design, sponsored by the Canadian Architect, Canadian Architect, June 2001, http://www.cdnarchitect.com/main.htm.
- 2001 Three Stars, Computer Reconstruction: Temple Site at Phimai, Second Annual Vancouver Island Film, Video & New Media Festival, Aug. 2-4, 2001.

## SCHOLARLY ACTIVITIES

#### **Books Chapters**

Dawson, P and Levy, R. 30 Days of Night: The Role of Light and Shadow in Inuit Architecture North of the Arctic Circle. <u>Oxford Handbook of Light in Archaeology</u>. Edited by Constantinos Papadopoulos and Graeme Earl. Oxford University Press, (in press).

Vishkaie, R. S., & Levy, R. SketchBoard: Design and Evaluation of Interactive Tools for the Design Review Process, International Journal of E-Planning Review, (in press)

Vishkaie, R. S., & Levy, R. M. Making Design Review Interactive. in <u>Analyzing Art, Culture, and</u> <u>Design in the Digital Age</u>. International Journal of Art, Culture and Design Technologies, 2015, pp. 234-257. [link]

Levy, R., and P. Dawson, Interactive Worlds as Educational Tools for Understanding Arctic Life, in <u>Pastplay: Teaching and Learning History with Technology, edited by Kevin Kee,</u> <u>University of Michigan Press</u>, Ann Arbor, 2014.

Levy, R. The Virtual Reality Revolution: The Vision and the Reality, InTech, New York City, 2012. [link]

R. Levy, Laser Scanning, a Tool in Archaeology and Architectural Preservation in <u>Archaeology</u>, edited by P. Dawson, Thomson Nelson, Scarborough, ON Publishers, 2008, 522-523.

Katz, L and J. Parker, H. Tyreman and R. Levy, Virtual Reality, WIT Press, Southampton, Boston, 2008. [link]

MacLeod, Douglas, Larissa Muller, David Covo and Richard Levy. Design as an Instrument of Public Policy. Chapter in Paola Poletti and Philip Beesley (eds) <u>Ourtopias</u>. Riverside Architectural Press. 2008.

Levy R. Computer Visualization and DTM: Historic Resource Management and Design in <u>Community Destination Management</u>, edited by Walter Jamieson, Binghamton, New York: The

Haworth Press Inc., 2006, 169-180. [link]

Levy, R. and E. Dickson, GIS Remote Sensing and Tourism Destination Management in <u>Community Destination Management</u>, edited by Walter Jamieson, Binghamton, New York: The Haworth Press Inc., 2006, 101-111.[link]

Wiessner G. and. Levy, R. Application and Evaluation of Visualization Techniques in Project Negotiation: The Nonthaburi Sustainable Canal Development Project in Thailand, <u>Land</u> <u>Development in the 21st Century</u>, edited by Hee Soo Chung and Soo Young Park, Seoul Korea: Eastern Regional Organization for Planning and Housing Korean Charter, 2001, pp. 733-741.

Levy R. Computer Visualization and DTM: Historic Resource Management and Design in <u>Managing Community Tourism Destinations in Southeast Asia: Principles and Practice</u>, CIDA funded publication, Bangkok, Thailand: Saengsawang World Press Co., Ltd, BAIT, 2001, pp.131-140

Levy, R. and E. Dickson, GIS Remote Sensing and Tourism Destination Management in <u>Managing Community Tourism Destinations in Southeast Asia: Principles and Practice</u>, CIDA funded publication, Bangkok, Thailand: Saengsawang World Press Co., Ltd, BAIT, 2001, pp.77-86.

Levy, R. The Role of Computers in Street Design, chapter in <u>Images of the Street</u>, London, England: Routledge Press Ltd., 1998, 58-72. [link]

## Journal Papers/Conference Papers/Articles

AbuHafeetha, M., Noel. N. and Levy, R. M. Agricultural Land Use Change and its Drivers in the Palestinian Landscape Under Political Instability, the Case of Tulkarm , <u>City Journal of</u> <u>Borderlands Studies</u> (DOI: 10.1080/08865655.2017.1344561), in print.

Adagha, Ovo, Levy, R., Carpendale, S. Gates, Lindquist, M., Evaluation of a visual analytics decision support tool for wind farm placement planning in Alberta: Findings from a focus group study, <u>Technological Forecasting and Social Change</u>, Jan. 2017.

Dawson, P. C., and Levy, R., From Science to Survival: Using Virtual Exhibits to Communicate the Significance of Polar Heritage Sites in the Canadian Arctic, <u>Open</u> <u>Archaeology</u>, 2 (1), November 2016, 209-231.

Levy, R., and P. Dawson, Fort Conger, an Interactive Virtual World for Exploring the Science of the 19th Century, <u>Virtual Archaeology</u>, 2015, <u>Proceedings</u>, St. Petersburg, Russia, 2015, pp 50-53.

Adagha, O., Carpendale, S., & Levy, R. M. Decision Support Requirements for Wind Farm Placement Planning in Alberta. <u>Journal of Decision Systems</u>, 2015, 24:2, 178-205.

Adagha, O., & Levy, R. M. Towards a Product Design Assessment of Visual Analytics in Decision Support Applications. <u>Journal of Intelligent Manufacturing</u>, (2015): 1-11.

Bray S, Arnold AE, Levy RM, Iaria G., Spatial and temporal functional connectivity changes between resting and attentive states, <u>Hum Brain Mapp</u>. 2015 Feb;36(2):549-65.

Vishkaie, R. S., & Levy, R. M.. Bubble Play: An interactive Learning Medium for Young Children, <u>Proceedings of the 2015 IEEE International Conference on Cyberworlds</u>, 2015, 286-293

laria, G. Arnold, A, Burles, F., Liu, I., Slone, E, Barclay, S. . Levy. R.M. Bech-Hansen, T, Decreased functional connectivity between the hippocampus and dorsolateral prefrontal cortex is associated with lifelong history of getting lost, <u>Brain, Journal of Neurology</u>, 2014, June 28.

Vishkaie, R, Levy, R, Tang, A Design Review Process: Can New Technology Improve the Art of Participatory Communication. <u>International Journal of E-Planning Research (IJEPR)</u>, 2014, 3(4), 23-39

Arnold, A., Protzner, A., Bray, S., Levy, R. M., Iaria, G. Neural network configuration and efficiency underlies individual differences in spatial orientation ability, <u>Journal of Cognitive</u> <u>Neuroscience</u>, February 2014, 26 (2), 380-394].

Burles, F., Guadagni, V., Hoey, F., Arnold, A. E., Levy, R. M., O'neill, T., Iaria, G Neuroticism and Self-Evaluation Measures are Related to the Ability to From Cognitive Maps Critical to spatial Orientation, <u>Behav Brain Res</u>, 2014, 271:154-9.

Vishkaie, R. S., Levy, R. M., & Tang, A. Urban Planning Process: Can Technology Enhance Participatory Communication? <u>Journal of Urban Planning and Design Research</u>, 2014, 2(1), 20-31.

Arnold, A., Burles, F., Bray, S., Levy, R. M., Iaria, G. Differential Neural Network Configuration during Human Path Integration, <u>Front Hum Neurosci</u>, 2014, Apr 29;8:263.

Slone, E., Burles, F., Robinson, K., Levy, R., Iaria, G Floor Plan Connectivity Influences Wayfinding Performance in Virtual Environments, <u>Environment and Behavior</u>, 2014, 1-15.

Dawson, P. C., Bertulli, M., Levy, R., Tucker, C., Dick, L., Cousins, P. Application of 3D Laser Scanning to the Preservation of Fort Conger, a Historic Polar Research Base on Northern Ellesmere Island, Arctic Canada, <u>Arctic</u>, 2013, 66:2, 147-158.

Arnold, A.E.G.F., Burles, F., Krivoruchko, T., Liu, I., Rey, C.D., Levy, R.M. & Iaria, G. Cognitive Mapping in Humans and Its Relationship to Other Orientation Skills <u>Experimental Brain Research</u>, Springer-Verlag, Berlin, 224:3 (2013), 359-372 [link]

Vishkaie, R. S., & Levy, R. M.. Perception and Reality: Exploring Urban Planners' Vision on GIS Tasks for Multi-Touch Displays. In Proceedings of the 2012 <u>ACM international conference on Interactive tabletops and surfaces</u> (ITS '12). ACM, New York, NY, USA, 265-270, 2012.

Mor, L., Levy, R., Boyd, J. Augmented Reality for Virtual Renovation, <u>ACCMM Proceedings</u>, 2012. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Mor\_Levy\_Boyd\_ACCMM2012.pdf</u>

Mohammed-Amin, R.K., Levy, R., Boyd, J. Mobile Augmented Reality for Interpretation of Archaeological Sites. <u>ACCMM Proceedings</u>, 2012. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Mohammed\_Amin\_Levy\_Boyd\_ACCMM2012.pdf</u> Liu, I., Levy, R., Barton J. J., Iaria, G. Age and gender differences in various topographical orientation strategies. *Brain Research*, *1410:* 112-9, 2011.

Levy, R, Using Role-Playing Games for Teaching History and Literacy. <u>E-Learn, Association for</u> the Advancement of Computing in Education, <u>Proceedings</u>, 2011. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_AAEC2011.pdf</u>

Levy, R, Virtual Reality: A Tool for Urban Planning and Public Engagement. <u>Computers is</u> <u>Urban Planning and Urban Management (CUPUM)</u> Proceedings, July 7, 2011, Lake Louise, Alberta.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy RM CUPUM2011.pdf

Levy, R., and P. Dawson, Predicting The Behavior of Game Players, Space Syntax and Urban "Playful Technology in History" SSHRC sponsored Symposium, Niagara-on-the-Lake, ON . April 30, 2010.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Dawson2010.pdf

Dawson, P. Levy, R. Oetelaar, G, Arnold, A Lacroix D, Documenting Mackenzie Inuit architecture using 3D laser scanning, <u>Alaska Journal of Anthropology</u>, 2009 (2) 31-44.

Levy, R., and P. Dawson, Using finite element methods to analyze ancient architecture: an example from the North American Arctic, <u>Journal of Archaeological Science</u>, 36 (2009) 2298-2307.

http://www.sciencedirect.com.ezproxy.lib.ucalgary.ca/science/article/pii/S0305440309002131

Levy, R., G. O'Brien and A. Orich, "Predicting The Behavior of Game Players, Space Syntax and Urban Planning Theory as a Predictive tool in Game Design, <u>VSMM Conference</u> <u>Proceedings</u>, IEEE, 2009, pp 203-208.

https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/LevyOBrienOrichVSMM09.pdf

Levy, R. and Dawson, P, Exploring Thule Culture—Constructing Virtual Worlds for 3D Theaters, <u>Computer Applications and Quantitative Methods in Archaeology</u>, Williamsburg, VA, 2009. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_Dawson\_CAA2009pdf.pdf</u>

O'Brien, Mary Grantham, Richard M. Levy, and Annika Orich. "Virtual Immersion: The role of CAVE and PC technology." CALICO Journal 26:2, January 2009. https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/BrienLevyOrichCalico2009.pdf

O'Brien, Mary Grantham, and R. Levy. "Exploration through virtual reality: Encounters with the target culture." Canadian Modern Language Review. June, 2008. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Obrien\_LevyCMLR-6004.pdf</u>

Levy, R. and Dawson, P. Structural Analysis, A Tool for Testing 3D Computer Reconstructions of Thule Whalebone Houses, <u>Computer Applications and Quantitative Methods in Archaeology</u>, <u>Proceedings 2007</u>, 2008, pp. 134-39.

https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_et\_al-thuleCAA07.pdf

Levy, R., and L. Katz, Virtual Reality Simulation: Bobsled and Luge, <u>Symposium Proceedings</u>, <u>6tn International Association of Computer Science in Sport</u>, 2007, pp. 241-251. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_Katz\_IACSS2007.pdf</u>

Levy, R., H. Widemann, R. Owston, and Annika Orich . Knight Elimar's Last Joust: A Virtual Environment Game for Promoting Literacy Across the Curriculum Ed Media, Proceedings, 2007.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Owston Wideman AorichEDMEDIA2007.pdf

Levy, R., and M. G. O'Brien, A Virtual World for Teaching German, Canadian Game Studies Association Journal, 1:1, 2007.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/LevyObrien GGSA2006.pdf

P. Dawson, R. Levy, D. Gardner, and M. Walls. Simulating the Behavior of Light Inside Arctic Dwelling: Implications for Assessing the Role of Visual Perception in Task Performance, World Archaeology, 2007 39(1) 17-35.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Dawson Levy Gardner Wall World%20Archaeologv2007.pdf

Levy, R., and P. Dawson, 3D Imagining as a Tool in the Computer Reconstruction of a Thule Whalebone House, IEEE, Multi-Media Spring 2006, 78-83. https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Dawson IEEEMultimedia 2006.pdf

P. Dawson, and R. Levy, Using 3D Computer Models of Inuit Architecture as Visualization Tools in Archaeological Interpretation: Two Case Studies from the Canadian Arctic, Field Archaeology, 2006, 185-195.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Dawson Levy FieldArchaeolgy2006.pdf

Levy, R. Virtual Reality, A Tool for Planners, Plan Canada, 2005 Vol. 45 (4) pp 20-22. https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Plan Canada2005.pdf https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Plan Canada2005.pdf

Levy, R. Virtual Reality, Report on Education Session, Downtown Real Estate Development, Plan Canada, 2005, Vol. 45 (4) p 46.

P. Dawson, R. Levy, Explore the Ideological Dimensions of Thule Whalebone Architecture in Arctic Canada, Internet Archaeology, 18:1, 2005. http://intarch.ac.uk/journal/issue18/

Levy, R. The Role of Laser Scanning in the Preservation and Renovation of Historic Architecture, 3D Digital Imagining and Modeling – Applications of Heritage, Industry, Medicine and Land, Padova, Proceedings, 2005.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/LevyUNIPD2005 WSH2005-26182.pdf

Guarnieri A, R. Levy, A. Vettore, Integrated Modeling Systems for 3D Vision, 3D Digital Imagining and Modeling – Applications of Heritage, Industry, Medicine and Land, Padova, Proceedings, 2005.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Guarnieri Levy Vettore WSH2005-2005.pdf

Levy R. and P. Dawson, From Laser Scanning to Virtual Reality: The Art and Science of Archaeological Reconstructions, Ed Media, World Conference on Educational Multimedia, Hypermedia & Telecommunications. Proceedings. 2005. https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Dawson Ed Media2005.pdf

Sorrentino, R.M., R. Levy, L. Katz, X. Peng, Virtual Visualization: Preparation for the Olympic Games Long-Track Speed Skating, International Journal of Computer Science in Sport, 2005

4:1, 39-44.

https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Sorrentino\_Levy\_Katz\_Peng\_IJCSS-Volume4\_1\_2005.pdf

Levy, R. and P. Dawson and C. Arnold, Reconstructing Traditional Inuit House Forms Using 3D Interactive Computer Modeling, <u>Journal of Visual Studies</u>, 2004, 19(1):26-35. <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_Dawson\_Arnold\_Visual%20Studies2004.pdf</u>

Levy, R. and Dawson, P, From Laser Scanning to Virtual Worlds: The Reconstruction of Traditional Inuit Houses, <u>New Media Research Network Conference</u>, <u>Proceedings</u>, 2004. <u>http://scholar.google.ca/scholar?q=Dawson%2C+P.%2C+Levy+R.+++Documenting+Mackenzie</u> +<u>Inuit+architecture+using+3D+laser+scanning&btnG=&hl=en&as\_sdt=0%2C5</u>

Dawson, P. and Levy, R., Using 3D Computer Models of Inuit Architecture as Visualization Tools for Examining Social Organization: Two Case Studies from the Canadian Arctic ' <u>Dynamics of Northern Societies' SILA/NABO, Proceedings</u> <u>Copenhagen</u>, May 10th - 14th , 2004, 187-197. <u>https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Dawson Levy SILA 2006.pdf</u>

Levy, R. Urban Design and Computing, Planning, Canadian Institute of Planners, fall, 2004, Vol. 44:3, pp. 50-52.

Sorrentino, S. R, Levy, R., L. Katz, X. Peng, Virtual Visualization : Preparation for Olympic Games Long-Track Speed Skating, International Journal of Computer Science in Sport, 4:1, 2003.

https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Sorrentino\_Levy\_Katz\_PengIJCSS2003.pdf

Katz, L. & Levy, R. Virtual Environments for Training Speed Skaters. <u>Speedskating World 5</u>, Netherlands, 2003, pp. 24-25.

Sorrentino, Morey, Katz, L, Levy, R. M. & Peng, X. (2002). Virtual Reality and Elite Athletes. Proceedings of the 6th IOC World Congress on Sports Science/American College of Sports Medicine, St. Louis, USA.

Levy, R. et. al. VR, Animation and Video: Speed Skating Simulations, <u>IASTED International</u> <u>Conference on Artificial Intelligence and Applications, Proceedings</u>, 2002 <u>https://webdisk.ucalgary.ca/~rmlevy/public\_html/Publications/Levy\_etal\_IASTED\_2002.pdf</u>

Levy, R., Temple Site at Phimai, Modeling for the Scholar and the Tourist, <u>VSMM Conference</u> <u>Proceedings</u>, IEEE, 2001, pp. 147-158. http://csdl.computer.org/comp/proceedings/vsmm/2001/1402/00/1402toc.htm

Levy, R. Virtual Reality and the Urban Landscape, L<u>eonardo Electronic Almanac</u>, International Society for the Arts Sciences and Technology (ISAST) and MIT Press, 8 (12), <u>http://mitpress2.mit.edu/e-journals/LEA/ARTICLES/LA\_LEVY/levy.html</u>

Wiessner, G., and R. M. Levy Application of Computer Visualisation Techniques in Project Negotiation: The Nonthaburi Canal Development Project in Thailand <u>EAROPH Proceeding</u>, Seoul, Korea 2000.

Levy, R. The Role of Computer Visualization in Design Review, <u>Sixth International Conference</u> on <u>Computers in Urban Planning and Urban Management Proceedings</u>, 1999. https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy CUPM99.pdf

Levy, R. Information Technology and the Planning Profession - Where is it taking us?, <u>Plan</u> <u>Canada</u>, 1998, Vol. 38, No. 5, 24-29

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy PlanCanada1998.pdf

Levy, R. Data or Image: The Influence of Professional Culture on Computing in Design, <u>Acadia</u> <u>Quarterly</u>, Fall, 1997; 8-11,22-23.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy Acadia1997.pdf

Levy, R. Computing and Design: The Role of Design Culture, <u>Canadian Society of Landscape</u> <u>Architecture</u>, <u>Proceedings</u>, 1997.

Levy, R. Creating Models for Visual Impact Assessment, <u>Tenth Annual Symposium on</u> <u>Geographic Information Systems Proceedings</u>, Vancouver, Feb. 8, 1997.

Levy, R. Computer Modeling: An Image of the Future, <u>Plan Canada</u>, Vol. 35, No. 5, September, 1995, pp. 24-25.

https://webdisk.ucalgary.ca/~rmlevy/public html/Publications/Levy PlanCanada1995.pdf

Levy, R. Visualization of Urban Alternatives, <u>Environment and Planning B</u>, Spring 1995, Vol. 22, pp. 343-358.

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Levy, R. Computer Modeling and Visualization in Urban Planing: An Instrument for Negotiating Public-Private Initiatives, <u>Geoinformatics'95 Hong Kong</u>: <u>RS, GIS, and GPS in Sustainable</u> <u>Development and Environmental Monitoring</u>, Hong Kong, May 27, 1995.

Levy, R. The Role of the Computer Visualization in Planning Review, <u>Annual Planning</u> <u>Conference of the Canadian Institute of Planners, American Planning Association</u>, Toronto, April 9, 1995.

Levy, R. Computer Modeling and Visualization in Urban Design, <u>URISA</u>, <u>Alberta Chapter</u> <u>General Meeting</u>, Edmonton, Alberta, Oct. 20, 1994.

Levy, R. Real Estate Development and the Use of CAD: Visualization Techniques in Decision Making, <u>CPGIS Annual Conference</u>, Calgary, Alberta, June 13, 1994.

Levy, R. CAD Based Decision Support Systems for Real Estate Development, <u>URISA, Alberta</u> <u>Chapter Annual General Meeting</u>, Calgary, Alberta, June 8, 1994.

Levy, R. Visualization of Urban Alternatives, <u>Third International Conference on Computers in</u> <u>Urban Planning and Urban Management</u>, Atlanta Georgia, July 24, 1993.

Levy, R. Creating an Urban Vision, <u>14th</u> <u>International Making Cities Livable Conference</u>, Charleston, SC, March 9, 1993.

Levy, R. Public Private Partnerships, <u>New York State Conference of Mayors and Municipal</u> <u>Officials</u>, Glens Falls, NY, July 23, 1992.

Levy, R. The Role of Street Railways in the Development of 19th Century Washington, D.C., <u>Eleventh Annual Conference on Washington, D.C., Historical Studies</u>, Washington D.C, Feb. 24, 1984.

Levy, R. The Art and Science of Suspension Bridge Design: The Engineering Designs of John A. Roebling, <u>Society for the History of Technology</u>, <u>Annual Conference</u>, Washington, D.C., Oct. 21, 1983.

Levy, R. American Technology in the Early 19th Century: Roebling's Bridge Designs, <u>Society</u> <u>for the History of the Early Republic</u>, Annual Conference, Waltham, Massachusetts, July 22, 1983.

Levy, R. Self-Image and the Market: A discussion of the Professionalization of American Architects and Civil Engineers, 1865-1930, <u>Popular Culture Association</u>, Annual Conference, Louisville, Kentucky, April 15, 1982.

Levy, R. Tall Frame Design in America, <u>American Society of Civil Engineers</u>, Mohawk-Hudson Section Meeting, Albany, April 19, 1982.

Levy, R. The Impact of Professionalization on the Supply and Demand for Architects and Civil Engineers in the United States, 1865-1940, <u>Economic and Business History Society</u>, Annual Conference, Los Angeles, April 27, 1979.

Levy, R. The Role of Research in the Development of the College of Civil Engineering, University of California, Berkeley, 1890-1940, <u>Society for the History of Technology and Culture</u>, Oct 20, 1977.

Levy, R. The Architect and Civil Engineer, 1870-1929,: A Discussion of Professionalization in America, <u>Society of Architectural Historians</u>, Annual Conference, Los Angeles, Feb 4, 1977.

## **Conference Panels**

R. Levy, Games and Teaching, Département d'histoire, Université du Québec à Montréal, May 21, 2015.

R. Levy, Virtual Reality and Sport, Panel Discussion, <u>Symposium, 6tn International</u> <u>Association of Computer Science in Sport</u>, Calgary, Alberta, June 4, 2007

Levy, R. Brian Corrie, Pierre Boulanger, Rob Woodbury, David Langstroth, Gilbert Paquette <u>BCNET</u>, Vancouver, Canada, April 26, 2006.

Levy, R. <u>Plenary Presentations</u>, New Media Research Network Overviews Continued: <u>3D Web Research Network Netera Alliance</u>, University of Calgary, Richard Levy, University of Calgary, March 26, 2004.

Levy, R. The Role of the Computer Visualization in Planning Review, <u>Annual Planning</u> <u>Conference of the Canadian Institute of Planners, American Planning Association</u>, Toronto, Organizer and Moderator, April 9, 1995.

Levy, R., Sixth Annual Preservation Regional Preservation Network Conference, Mumford, NY, Panelist on "Commercial Revitalization, Main Street", April 27, 1991.

Levy, R., New York State Waterfronts, A Symposium on Their History and Adaptive Use, Geneva New York, Geneva Historical Society, Hobart and William Smith Colleges, Organizer and Moderator, March 30, 1990.

Levy, R., <u>Social Science Association</u>, Annual Conference, Washington, D.C. Commentator on Baltimore Emerging as a National Metropolis, Oct 27, 1983.

Levy, R.. <u>West Coast History of Science Society</u>, Spring Meeting, California Institute of Technology, Commentator on Electrical Engineering: The First Century, by Charles Susskind, May 26, 1979.

## **Technical Papers /Research Reports**

Stelfox, B., Levy, R. and Gariepy, H. City of Edmonton Modeling Project Using ALCES, 2004.

Macleod, D., Levy, R and Pendergast, B, Application of Virtual Reality to the FlexHousing Design Competition, Application of Virtual Reality to the Flex-Housing Design Competition, 6855-5-26, <u>Canada Mortgage and Housing Corporation</u>, 1996.

Richard M. Levy and Ron Li, Geomatics, GIS Feasibility Study for the MD of Foothills, Alberta, 1994-1995.

Levy, R. Project Manager, Pincher Creek Main Street Revitalization Plan, Design Study, Pincher Creek, Alberta, 1993.

Levy, R., A Regional Agricultural Strategy Plan for Genesee/Finger Lakes Region, prepared in Conjunction with Stuart I. Brown Associates, Inc., Rochester, N.Y. 1991.

#### **Technical Manuals**

Levy, R. Modeling of and Architectural and Archaeological, Sites, The 4<sup>th</sup> International <u>3-D</u> <u>Imaging and Modeling Conference</u>, Banff, Alberta, October, 6, 2003.

Levy, R. GIS Modeling and Visualization in Urban Planning, <u>AEC International</u>, 1996, revised in 1997, 1998.

#### Exhibitions, Competitions, Websites, Screenings and Publication of CGI

Reconstruction of a Thule Whalebone House, Canadian Arctic, <u>Sir Banister Fletcher's Global</u> <u>History of the Architecture, 21 Century</u>, London: Bloomsbury Publishing, (in print).

The Raven's Story, Invited Competition, Dessault Sytemes Ltd, Paris, France, 2009.

Competition, Public Art Project for Shepard Wetlands Legacy Park, City of Calgary, 2008.

Journey to Kitgaaryuk" Virtual Reality, Interactive Multimedia Learning Program, Canadian Museum of Civilization, Ottawa, 2003, November 6, 2003 - January 9, 2005.

Computer Reconstruction: Temple Site at Phimai, PNC (Pacific Neighborhood Consortium), organized by the NECTEC (the National Electronic Computer Technology Centre) Bangkok, Thailand, November 7-9, 2003.

Making the Virtual Real, (Levy, Gadbois), The 4<sup>th</sup> International <u>3-D Imaging and Modeling</u> <u>Conference</u>, Banff, Alberta, October, 6, 2003.

Computer Reconstruction: Temple Site at Phimai, VSMM2001 Video, Special Public Screening, University of California, Berkeley, Oct. 24, 2001. Exhibit

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Proposed Public Sculpture for the City of Boston, by invitation, Marquette Boston Artists Project, June 5 - July10, 1970, City Hall, Government Center, Boston, Massachusetts.

Proposed Public Sculpture for the City of Boston, by invitation, Project 70, Institute of Contemporary Art, Boston, MA, April 14-21, Massachusetts.

#### Interviews: TV, Radio, Print and WEB

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CTV, Speed Skating Simulator, Jan 17, 2003

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CBC, Radio, Calgary, Are we growing too fast, July 3, 2002.

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CBC, Calgary, Topic: State of Affordable Housing in Calgary, The Eye Opener, May 11, 1998. 1998.

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#### <u>Web</u>

#### 2003

The Animation Lab, 'Phimai Temple Tour', TECHTV, http://www.techtv.com/eyedrops/shownotes/story/0,24330,3381994,00.html.

#### 2002

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Prasat Phimai. Richard M. Levy, Université de Calgary. Images de synthèse de Prasat Phimai. CANADA juillet 2001 *Remarque : peu d'informations sur le site archéologique,* http://www-sira.montaigne.u-bordeaux.fr/realite-virtuelle/IS.htm

PC Immortalizes Ancient Temple, TRN News, October 24, 2001. http://www.trnmag.com/Stories/2001/102401/PC\_immortalizes\_ancient\_temple\_102401.html

Thailand Travel Information, Phimai, An Extension of the Khmer Empire, http://www.guidetothailand.com/issan/issan phimai.htm

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#### 2001

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### 1998

Autodesk's Customer Spotlight, http://www.autodesk.com/solution/customer/ucalfwww.htm, Nov. 1998.

# **Design and Professional Practice**

### Laser Scanning, Computer Modeling and Virtual Environments

Reconstruction of Ft. Conger, Greely's Main Building, Virtual Museum Program, Canada, Virtual Museum Program of Canada, 2014-2016.

Reconstruction of Ft. Conger, Peary's Huts, Parks Canada, 2010-2011.

Sod House Website, Funded under SHRRC Home, Hearth, and Household in the Circumpolar North, BOREAS, 2010.

The Raven's Story, Invited Competition, Deassault Sytemes Ltd, Paris, France, 2009.

Dover Mine Virtual Model, Petro-Canada Oil & Gas, Calgary Alberta, 2009.

3D Inuit Project, Glenbow Museum, sponsored by the Virtual Museum Project, 2008, <u>http://www.glenbow.org/about/behind/thule.cfm</u>.

NeuroArm Simulation, Faculty of Medicine, University of Calgary, 2008.

Virtual Luge, Whistler Track, Demonstration project, Canadian Olympic Luge and Bobsled Team, 2008.

Knight Elimar's Last Joust: A Virtual Environment Game for Promoting Literacy Across the Curriculum, Canadian Council on Learning, 2006-08.

Laser Scanning and Historic Documentation of Pennylane, Calgary, in conjunction with Point Geomatics, Ltd., 2007.

STARS, Virtual Reality Model, Air Ambulance, 2006.

Virtual World, Culture in the Language Classroom: An environment for teaching German. In conjunction with Mary Grantham O'Brien, PhD, Department of Germanic, Slavic and East Asian Studies, 2005.

Virtual World, Alberta Court House, Calgary, work was done jointly with Barry Pendergast, Architect, 2005.

Virtual Hospital Room, Rocky View Hospital, Calgary, Alberta, Work was done jointly with Barry Pendergast, Architect, 2005.

Virtual Kabul, Demonstration Project, Canadian Arm Forces, 2005.

Virtual Luge, Salt Lake Track, Demonstration project, Canadian Olympic Luge and Bobsled Team, 2004-05, 2008.

Virtual Reconstruction, Central United Church, Calgary, Alberta, 2004-05

Virtual Dieppe, People and Places, Telling Stories in Online 3D Environment, In connection with

grant submission to Canadian Heritage New Media Research Networks Fund, April 15, 2004.

Virtual Thule Whalebone House, sponsored by a grant from Learning Commons and 3D Web, 2004.

Preservation of Archaeological Detailing using 3D Laser Scanning, Lougheed House, Calgary, Alberta, Calgary Civic Trust, 2003.

A Virtual Reconstruction of St Mary's School, Calgary, City of Calgary, 2002-3.

Virtual Reality Kayak Simulator, Prince of Wales Northern Heritage Centre, NWT, 2002.

Virtual Reality Model of a Inuvialuit Traditional Sod House, Prince of Wales Northern Heritage Centre, NWT, 2001-2.

Virtual Reality Speed Skating Simulator, Olympic Oval, Salt Lake City, Utah, 2002

Virtual Reality Speed Skating Simulator, Olympic Oval, University of Calgary, 2001

Diavik Diamond Mines, Inc. Yellowknife, Computer Modeling, for Visual Impact Assessment and Community Participation (Revisions to the 1998 model), NT, Canada, 2000-01.

Calgary Distribution Centre, Computer Model for a Proposed Inter-Modal Distribution Centre, Alberta, 2000.

Virtual Reality Model, Campus Plan, University of Calgary, Campus Planning Committee, Sept. 21, 2000.

Gunnar Wiessner, UNDP/UNCHS Asian Institute of Technology, Computer Model for: Development Design Guidelines, Khlong Bangkok Noi/Khlong Om Canal Area, Nonthaburi, Thailand, 2000.

John Merritt, Fraser Milnor, Attorney at Law, and Peter Liviaditis, President, General Manager, La Caille, Computer Model for a Study of the Visual Impact of a Proposed Development at 7th St. and 1st Ave, Calgary, Alberta, 1999.

City of Calgary, Design and Computer Model for a Study of the Visual Impact of a Proposed Hillside Residential Development Adjacent to Canadian Olympic Park (200+ acre site). This Project is a joint effort with Barry Pendergast, Architect, 1999.

Windsor Park Community Association Computer Modeling for Evaluating Proposed Changes in Zoning for the 400 Block of 55th Ave. of Calgary, Alberta, 1999.

Mike Dockman & Associates for Bill Tajcnar, Computer Model and Visual Impact Analysis for a proposed residential and commercial development (123 acres) presented to the community of Springbank, 1999.

Mike Dockman & Associates for George and Ilse Kruzeer, Computer Model and Visual Impact Analysis for a proposed residential development (77 acres) presented to the community of Springbank, 1999 Computer Model for the Site Analysis of a proposed industrial development project, Calgary, Alberta, Bruce Francis, CCIM, 1999.

Computer Modeling for Visual Impact Assessment, presented to Subdivision and Development Appeal Board, City of Calgary, June 11, 1998. Model was later used by the Windsor Park Community Association in the development of guidelines for future development, 1998.

Computer Modeling for Visual Impact Assessment, Stonepine Residential Development, Ltd., MD of Rocky View, Alberta, 1998.

Computer Modeling, for Visual Impact Assessment and Community Participation, Diavik Diamond Mines, Inc. Yellowknife, NT 1998, revisions to the model in 2000 and 2002.

Computer Modeling for Visual Impact Assessment of a planned subdivision for Stanley Urban Land, Calgary, Alberta, 1997.

Visual Impact Assessment of Proposed Improvements, Sunshine, Village, Alberta, 1996.

Visual Impact Assessment of the Proposed Expansion of Suncor's Oil Sands Development, Fort McMurray, Alberta in conjunction with Golder Associates, Calgary, Alberta, 1995-1996

Visual Impact Assessment for a Proposed Plus 15 Connector for 8th Ave, City of Calgary, 1995.

Computer Modeling and Visualization of a Proposed Commercial and Hospitality Center, Calgary, Alberta, for The Co-Operators, Development Ltd., Mississauga, Ontario., 1995.

Computer Modeling, Visualization and Multi-Media production for a Proposed Multi-family Development Center, for Celestine Ltd. in cooperation with BCMP Architects, Calgary, Alberta, 1995.

Visual Impact Study, Banff By-Law 1992: Computer Model Study, Planning Department, Town of Banff, 1995.

Computer Modeling and Visualization of a Proposed Residential Development Guidelines for Tuscany, Calgary, Alberta, for Carma, Ltd., 1994.

Computer Modeling and Visualization of a Proposed Residential Development for McKenzie Lake, Calgary, Alberta, for Carma, Ltd., 1993-1994.

Project Manager, Computer Modeling and Visualization of Proposed Expansion of the AKIVA Center, Pump Hill Homeowner's Association., 1993.

Computer Modeling and Visualization of Proposed Condominium Development for Canmore, Alberta, North West Homes 1980 Ltd., 1993.

#### Planning

Sunnyside/Hillhurst, Virtual Model and review of Hillhurst/Sunnyside, Area Redevelopment Plan, City of Calgary, Calgary, 2006-07.

A Comparison of Urban Footprint Associated with Alternative Growth Strategies for the City of Edmonton, joint project with Forem Technologies Ltd. 2005.

IEG, Database Design for Biological Field Data, McKenzie Delta, NWT 2001.

Price Waterhouse Coopers, GIS and Mapping of Retail Demand for selected Non-profit Outlets, Calgary, Alberta, 2001.

Richard M. Levy and Trevor Dickie, A Concept Plan for Skypark, Rural and Small Town Programme, Sackville, New Brunswick, 1995.

## Design

Designer, Residence (1700 sq. ft.) on Lake Cayuga near Kings Ferry, NY. construction of the house completed in 1994. Design 1991-92.

Stage Designer for "Tis Pity She's a Whore" by John Ford, Durham Studio Theatre, University of California, Berkeley, Nov. 1976.

Stage Designer for "Blood Wedding" by Federico Lorca, Durham Studio Theatre, University of California, Berkeley, Dec. 1975.

Assistant Stage Designer for "Operation Sidewinder" by Sam Shepard, Zellerbach Playhouse, University of California, Berkeley, May 1974.

Stage Designer for "The Trial" by Franz Kafka, adapted for the stage by Andre Gide and Jean L. Barrault, Durham Studio Theatre, University of California, Berkeley, Nov. 1974.

# **CURRENT TEACHING RESPONSIBLITIES**

# Formal Numbered Courses

EVDP 602	Computer Modeling of the Environment, 2011-15
EVDP 633	Project Management for Planners (with Prof. Ramjon in 2012), 2015
EVDS 611	Geographic Information Systems for Environmental Design, 2011-15
EVDS 622	Real Estate Development and Finance. 2011-15
EVDS 723.03	People and Technology with Profs. Gadbois, Wylant, 2011 winter .
EVDS 683.67	People and Technology with Profs. Gadbois, O'Grady, 2009.
EVDS 783.86	Computer Modeling 2010 Fall
EVDS 783.42	Computer Modeling with Prof. Gadbois 2009.
EVDP 683.343	Ecological Design and Management of Cultural and Regional Landscapes, with Profs. Musiani and Gates 2009.
COMS717.69 EVDS683.40	Visualization of Information, 2006, 2007.
Cont.Ed	GIS for Real Estate Development, 2006. 2008, 2009.
EVDP 603	Spatial Analysis for Urban Planners, 2006, 2007.
EVDS 713	Plan-Making: Research and Analytical Methods, 1993 –1998, taught 1999-2002 with Prof. Sasha Tsenkova. Course number prior to 1999: EVDS 683.95, 1998; EVDS 745,1993-1997.
EVDS 707	Ecological Management in Land Use Planning, Lecturer, 1997.
EVDS 702	Advanced Environmental Design Practice , faculty supervisor, 1993, 1997
EVDS 627	Introduction to Computer Applications, Course Supervisor, 2000-2006.
EVDS 697.07	Introduction to Computing for Urban Planners,1993-97. Course number EVDS683.97 in 1998) from 1999-present given as part of EVDS634 and EVDS636
EVDS 683.92	Real Estate and Development Finance, Course Manage. Instructor, Prof. Glen Lyons.
EVDS 683.35	Urban Design Theory, co-managed with Prof. Graham Livesey 1998, guest lecturer 2000, 2001, 2002.

EVDS 683.01	Computer Literacy, Course Manager, 2000-2003.
EVDS 679	Computer Modeling of the Environment, course number. Offered since 1994, previous course number EVDS683.38.
EVDS 671.04	Architectural History II, Late Renaissance to Early 20 <sup>th</sup> Century, lecturer, 1997
EVDS 667	GIS for Urban Planners and Environmental Managers. Offered since 1998, previous course number EVDS683.10.
EVDS 645	Site Planning and Urban Design co-managed with Prof. Robert Kirby in 1993.
EVDS 633	Introduction to Physical Planning and Design Methods and Techniques, 1992, 1995.
EVDP 615	Introduction to Physical Planning and Computing Technology, 1996- Present.
HLC 42964	CAD/GIS in Heritage Resource Management (CLC), 1994.
MNGT 797	Special Topics in MIS (jointly taught with Prof. Ron Murch), 1996,1997.
NPDS307	Introduction to GIS, 1999,2000.
MNGT	Supply Chain & Logistics Management, Executive Program, Schulich School of Business, York University in conjunction with The Van Horne Institute, June, 2000, Lecturer.
Directed Studie	S
2013 EVDS 783.B06	Sketch Based Dance Choreography, Elahe R. Moghaddam,
<b>2011</b> EVDS 783.77 EVDS 783.76	AR for Arch. & Archeological Visualization, Kamaran Ali Knoori AR for Urban & Site Navigations, R. Mohammed-Amin,
2010 EVDS 783.49 EVDS 783.59 EVDS 783.57	GIS for Urban Planners and Environmental Mangers ( 6 Students). Repurposing & Reuse Through Re-engineering, Rojin Vishkale Web Based Design Environments, Chao Liu
<b>2009</b> EVDS 703.38	CathyTaylor, Spatial Analysis for Urban Planners (Fall 2008)
EVDS 783.20	Rod Loring, Urban Design & Public Spaces (Winter 2009)

Art 631.02		Craig LeBlanc, Explorations in the use of CAD in 3D Representation. (Winter 2009).		
2002				
EVDS 783.6	62	Douglas Macleod, Douglas Macleod, Design Research in Architecture		
EVDS 783. 85		Gian-Carlo Carra, CAD Modeling of a Proposed Urban Redevelopment Plan for Kabul, Afghanistan		
<b>2001</b> EVDS 783.62		Matthew Craig, CAD and Urban Design: A case of Redevelopment.		
<b>2000</b> EVDS799.0	9	Anurag Jain, CAD in Urban Design.		
EVDS783. 8	39	Karen Rendek, Critical Literature Review of Transportation, Landuse and Safety Issues.		
EVDS783.1	1	Tony Napolitano, Computer Aided Design as a Tool in Urban Design.		
EVDS783.0	8	Chad Zyla, Digital Animation Design in Architecture.		
1994				
EVDS783.4	7	Trevor Dickie, Multi-Media & Urban Design: Projects and Principles.		
EVDS783.3	0	Michael Malama, Reading Course in GIS and Environmental Assessment.		
EVDS783.2	5	Anil Walji, Application in Geographic Information Systems: The use of MapInfo as a Tool in Resource Management.		
1991-92 1985	Visit	ing Assistant Professor Lecturer Art Department Hobart & William Smith Colleges		
Art 344		History Modern Architecture and Urbanism; undergraduate survey.		
Arch. 244		Architecture and Urban Design Studio; undergraduate studio.		
1984	Visit	ing Assistant Professor School of Architecture Cornell University		
Arch.388	Mode	ern Architecture and Urbanism; undergraduate survey.		

Arch.688 History of the American Landscape; graduate seminar.

# 1980-83 Visiting Assistant Professor School of Architecture Rensselaer Polytechnic Institute

- Arch.10.4410 Research Methods in Architecture; graduate seminar.
- Arch.10.4962 The Aesthetics of Design in America; upper division seminar.
- Arch.10.4965 Technology of the Built-Environment; undergraduate seminar.
- Arch.10.4966 A History of the Building Professions; undergraduate Seminar.
- Arch.10.201 Architecture, Urbanism and the Environment; undergraduate survey.
- Arch.10.622A Quantitative Methods for Architects and Planners; given in conjunction with Arch. 10.622.
- Arch.10.622 Graduate Studio in Urban Design.

# 1978-79 Lecturer, Department of History, University of California, Los Angeles

- History 2A History of Technology from Antiquity to the Renaissance, undergraduate survey.
- History 2B History of Technology from the Renaissance to the Industrial Revolution, undergraduate survey.
- History 2C History of Technology from the Industrial Revolution to the Present, undergraduate survey.
- History 101 Introduction to Historical Perspectives; The Economics of Technological Development; undergraduate seminar.
- History 179D History of American Technology; undergraduate seminar.
- History 240 The Professionalization of American Science and Technology. graduate seminar.

# 1974-76 Teaching Associate, College of Environmental Design, University of California, Berkeley

- Arch. 198 A History of Architectural and Civil Engineering Technology.
- E.D. 170 Architecture and Urbanism from Antiquity to the Middle Ages, assisted.

E.D. 171 Architecture and Urbanism from the Renaissance to the Modern Period, assisted.

# **GRADUATE SUPERVISION AND EXAMINATION**

### Master's Degree Project Supervision, EVDS

Rozhen Mohammed-Amin, Virtual Reality inn Reconstructing History, University of Calgary, 2010.

Rod Loring, "Architectural Guidelines for the Town of Chestermere, EVDS, University of Calgary, 2009.

Chen Peng, Planning Policy and Housing Development in Shenzhen, China University of Calgary, 2008.

Marcelo Motta Figueira, GIS to Support Regional Land Use Planning in a Rapid Urbanization Context, 2008.

Chen Pentan, A Planning Proposal for the Redevelopment of the Brentwood Shopping Area, Calgary, September, 2007.

Ke Zhou Making a Vital Place: The Case of Eau Claire Market, Calgary Alberta, September 24, 2007.

James Davison, The Virtual Planner, 2007.

Demain Reuter, Strategies for Increasing Commuter Cycling in Winter a Case Study of Calgary, 2006.

Malindi Elmore, Olympic Villages as a Tool for Urban Regeneration September 22, 2006.

Shawni Lo, The Evolution of Suburban Ethnic Commercial Landscape – The Case of Chinese Shopping Centres in Markham and Richmond Hill, Ontario, 2006.

Feng Xue An Urban Design for Datun Town Centre, 2006.

Carol Mak, An implementable Brownfield Redevelopment Strategy for Older Industrial Communities in Calgary, 2006.

Mathew Craig, Evaluating the Demand Car Sharing, Planning, October 23, 2004

Keith Robinson, VR as a tool in the evaluation of Way-finding Strategies, September 30, 2004.

Cynthia Burger, An Exploration of Community Development Theory and Practice, September 17, 2004.

Owen Craig, Virtual Architecture: Prototyping a 3-Dimensional Virtual Learning Environment. 2004, June 11, 2004.

Karen Kries, The Demand for Inner City Housing, Planning Program, March 22, 2004

Douglas Macleod, The Architecture of Cyberspace, Jan 29, 2004.

Xiufeng Peng, Speed Skater VR Simulator, Dec., 2003.

Anthony D'Allesandro, Modeling Crime at LRT Stations in Calgary, LRT Stations in Calgary, Planning Program, Dec. 16, 2003.

Cam Nelson, Designing with the Environment: Using GIS as a Tool for Community Traffic Safety Design, 2002.

Gordon Dickson, An Evaluation of Demand for High-Tech Commercial Space, 2002.

Karen Rendek, Supply Side Strategies for Managing Public Bus Service, 2002.

Pat Marples, An Implementation Strategy for the Northridge Greenway along the British Columbia Hydro Corridor, 2002.

Danica Rice, Calgary's Neighborhood Planning Process, Current Practice and Potential Improvements, Co-supervisor. 2001.

Jain Anurag, VR as a tool in the Preservation of Archaeological Sites, 2001.

Timothy Kroeker, Downtown Redevelopment Option, Red Deer, Alberta, 2000.

Kim Blanchard, Place and Atmosphere in Urban Design, 2000.

Zibin Wang, The Use of CAD and VR as a tool in the Evaluation of LRT Station, 1999.

Cam Chalmers, A Review of Plus 15 Policy in the City of Calgary, 1999.

Sarah Duncan, A Post Evaluation of C-4 Zoning, Calgary, 1999.

Karen Donnelly, A Concept Plan for a Mountain Recreational Resort, 1999.

Pam Mierau, Applications of GIS Functionality in Planning for Library Services, 1998.

Bob Towes, Aviation Risk Management 1998.

Ben Lee, IntelliCAD and Small Town/Inner City Community Vitalization: Preservation and Place Making, 1998.

Gary Pooni, New Westminster, The Impact of Zoning Changes on the Design of Downtown, 1998.

Robert Pierce, A Master Plan for the Currie Barracks Site, Calgary, 1998. (Gold Medallist).

Gordon Berg, Interface Design Guidelines for World Wide Web Planning Initiatives, 1997.

Sue Humble, Reducing Development Impact on Environmentally Sensitive Areas: A Look at the East Springbank Region, 1997.

Bruce Park, The Perception of Synthetic Urban Environments, 1996.

Tom Ainscough, Reurbanization in Calgary: A Planning and Urban Design Proposal for Mixed Use, Transit Oriented Development. 1996. (Gold Medalist)

Trevor Dickie, Computer Image Processing as a Tool in Small Town Design Planning & Decision Making, 1996.

Christi J. K. Beunder, An Analysis in Rural Land Use Planning: A Perspective from Practice, 1995.

Jenny Feick, Mountain Town with a Vision, 1995, Earthwatch Advisor.

Fergus MacClaren, The French Colonial Quarter in Hanoi, SRV: a Preservation Approach, 1995.

Michael Malama, GIS and Environmental Assessment: Oil and Gas Development, 1995.

Gary Buxton, The Redevelopment of the Suburban Mall, Faculty of EVDS,: Dec. 2, 1994. (Gold Medalist)

Trevor Scholdice, CAD and Urban Design, Faculty of EVDS, 1994.

Sharon Stroick, A New Mandate for the Federation of Calgary Communities, Faculty of EVDS, Defense Date: Sept. 19, 1994.

Kevin Froese, Urban Design for Lincoln Park, Faculty of EVDS, Dec. 14, 1993.

#### Master's Degree Project Supervision, EVDS (In Progress)

Case, Joseph "Urban Development and Streetcar lines in Calgary, A Case Study" EVDS, University of Calgary.

#### Master's, CMD Graduated

Chao Liu, Using Virtual Reality to Improve Design Communication. 2012.

Liraz Mor, An augmented Reality System for the PMB Based on the Museum Circle, 2012.

Gerry Straathof, Where is Every Body: Locating People Directly in Front of Large Screens using Multiple Kinects, MS, CMD Program, Feb 10, 2015, Co-Supervisor .

Elahe Rajabzadeh Moghaddam, Sketch-Based Dance Choreography, MS, CMD Program, Dec. 5, 2014, Co-Supervisor.

#### Master's Degree Project, EVDS (Examiner)

Abdullah Alshehri, New vision for Market Square in An-Amas: Urban Design for enhancement of town identity and cultural heritage, September 28, 2015

Mavhish Ali Khan, Playful Minds and Playful Designs: a Childs Perspective, April 28, 2011

Angela Mah on An Energy Reduction Program for Alberta Residential High-rise Buildings, that builds on precedent cases from Toronto and New York City, May 2, 2011.

Kamaran Ali Noori, Transvaluation of Architecture: A perspective on Performative Value iin Architecture, Dean's Examiner, 2011

David Mahalek, Integrating Bicycle Facilities with Public Transportation in Calgary September 27, 2010.

Daren Blair, An Ecozoic Housing Complex Defense: Sept 10, 2010.

Habbib, Bahareh the And-Land, a Proposal for a Transit Oriented Development in South Calgary, Urban Design, Jan 7 2008,

George Chahal, Planning for Ethnic Development, Planning, EVDS, University of Calgary, 2007.

Jyde Heaven, Historical Preservation: Creating a Framework for a heritage Management Strategy For the Canadian Forces Base CFB in Calgary, 2007.

Audrey Rogers, From Planning Policy to Build Form Reality Dean's examiner, Dec. 15, 2005.

Charles Lingren, A sustainable Transportation Initiative for Whistler March 3, 2005.

Fiona Friesen, Planning for Development of the University of Calgary West Campus Lands, (Dean's appointed examiner), Oct, 2004

Mac Hickley, The Grounds for citizen Engagement and roles of planners, April 11, 2003.

Jennifer Cardiff, Information and Communication Technology & Distance Education in Northern Alberta – Preparing for Supernet, June 21, 2002.

Stewart Morgan, The Architecture of Information, A Framework for the Spatial Design of a Mobil Augmented Reality Interface, June 5, 2002.

Justin Pockar, Scalar Trainsformation, April 12, 2002

James Q. Mazak, A Demonstration Project: Mission Synergy Centre, Dec. 7, 2001.

Linda Cunningham, Breaking down the Barriers: Making National Hockey League Arenas More Accessible, 2000.

Jochyne Belisle, The Urban Weave, Exploring the Potential of Architecture as a Cultural Catalyst, 2000.

#### Master's Degree (External Committee Member)

Luciano Tomaghelli, Kinematic and Kinetic Forces Associated with Start Perfromace in Elite Luge Athelets, Kinnesiolgy Oct 29, 2015.

Derrick Hoekstra, Self-Identity in relation to Art - Car Culture ? Pop Culture ? Advertising? Art Department September 3, 2015.

Andrew Wu, A 3D Multiscale Model of Chemotaxis in Bacteria, MS, Department of Computer Science, May 8, 2015.

Elaf Sameh Selim,, Requirements and Reuse in and Agile Environment for Tabletop-based GIS applications CPSC, April 20, 2013.

Kwame Ephraim Danso, Peri-Urban Land Tenure in Ghana (Accra): Case Study of Bortianor, Department of Geomatics Engineering, Dec, 13, 2012

Mina Hassanvand, Factors Affecting Utility of Passenger Modes in Calgary Department of Civil Engineering (Transportation Planning), Sept. 18, 2012.

Xiang Chen, Body-Centric Interaction with a Screen-based Handheld Device, Department of Computer Science, May 14, 2012

Darren John Andreychuk, Evaluating the Performance of Direct Injection and TUIO-based Protocols for Multi-Touch Data Transfer, Department of Computer Science, August 23, 2012.

Shahedul Huq Khandkar Thesis Title A Domain Specific Language for Multi-Touch Gestures Department of Computer Science, December 22, 2010.

Seyed Ali Hosseini Khayat, Distributed Wizard of Oz Usability Testing for Agile Teams, Department of computer Science, December, 17, 2009.

Shahid Nadeem, M. ENG., Department of Civil Engineering, University of Calgary, March 18, 2009.

Katayoon Etemad, Node Focused Visualization of Large Trees, Department of Computer Science, December 16, 2009.

Richard Allen Pusch, Constraint-Based Surface Deformation, Department of Computer Science, July 22, 2009.

Ryan Vanderputten, M.Eng., Department of Civil Engineering, University of Calgary, Sep. 15, 2008.

Sunita Gurung, "Public Participation and Sustainable Transportation Decision Making: A Case Study for the Town Canmore," Department of Geography, University of Calgary September 18, 2007,

Yang Guan, "A System Model Practice in Urban Development Prediction, Department of Geography, University of Calgary, Defense: June 22, 2007.

Ken Sam, "Developing a Web-based spatial Decision Support System for Personalized Emergency Planning" Department of Geography, University of Calgary, January 19, 2007, Geography.

Annie Tat, "Visualizing Digital Communication, on the visualization of digital Communication," CPSC, University of Calgary, 2007.

Magesh Chandraouli "Integration of GA-Based Multi-objective Optimization with VR-Based Visualization on Solve Landuse Problem" August 30, 2007.

Yang Guan, A Grey System Model Practice in Urban Development Prediction, Geography, Social Science, University of Calgary, Defense: June 22, 2007.

Ken Sam, Developing a Web-based spatial Decision Support System for Personalized Emergency Planning Geography, Social Science, University of Calgary, Defense: January 19, 2007, Geography.

Annie Tat, Visualizing Digital Communication, on the visualization of digital Communication, Computer Science, Science, University of Calgary, 2007

Stephen Dykstra, Hurdman Station Development Plan: A comprehensive Study, Geography, Social Scienceq, University of Calgary, Defense: September 29, 2006.

Roanna Man-Yue Chui, Service area Demarcation and Examination of Transit Oriented Development Site Dynamics: A Case Study of Calgary, Social Science, University of Calgary Defense: 2006:Aug 15, 2006.

Nathan Slichter,: Recylcling Depot Accessibility Analysis: City of Calgary, Geography, Social Science, University of Calgary, 2006.

Wesley John Hollis, Moving Forward: Public Transit in Canadian Mid-Sized Cities, Geography, Social Science, University of Calgary,: September 7, 2006.

Radoslav Gaidadjiev "Integration of Industrial Laser and Photogrammetric Measurements Using Straight Line Elements" Department of Geomatics Engineering, November 14, 2005

Modeling the Housing Market Spatial Dynamic: An Application of Geographically Weighted Regression (GWR) in the City of Calgary, Jinlin Zhang, Department of Geography, November 22, 2005

Mathew Sheldrake, Does Access Matter? A temporal Analysis of the Effect of Accessibility on the Development Patterns of Selected Land Uses in Calgary, Alberta, Department of Geography, Dec. 19, 2005

Steve Baumback in his thesis, Computer Interfaces Computer Interfaces Using Vision Based Gesture Recognition, Department of Computer Science, September 25, 2004.

Li, Kaidong, Managing Traffic Safety at Light Rail/Roadway Grade Crossings in Calgary: Coupled with GIS and Case-based Reasoning, Department of Geography, June 11, 2004.

Xuemin Haung, Clarence Woodsmas' student, An Allocation Model for Schools Children Department of Geography, April 27, 2004.?,

Xiangpei Guo, Computerized Adaptive Retention Training with Grade Nine Science students, Department of Education, Jan 5, 2004.

Sam Coiro The Analysis of Retail Catalog Transaction Data: Trend Surface Construction for the Spatial Exploration of Product Performance. September 15, 2003.

Robyn McGregor has written a study on the "Development of an Intelligent Transportation System Architecture for a Medium Sized City, Geomatics Engineering, Sept 3, 2003.

Shui Liu "Object Orientation in Route Guidance Systems. Geomatics Engineering, 2003.

Jepp, Pauline, PhD Candidacy Exam, Computer Science, May 2, 2003.

Brendan Lane, Model of Plan Communities for Image Synthesis, Department of Computer Science, June 23, 2002.

Chengqian Zhang, Forestry Practices Using RMS Geography Department, April 4, 2002.

Vincent Ng, Recreational Facility Accident/Incident Application of GIS: Safety Management Program Strategy for Village Square Leisure, Geography Department, March 27, 2002.

Kevin L. Carriere, The Polyphase Morphogenesis of the Lick Creek Cave, CRE, 2001.

Howard Hou-Lap Wong Where to find a better place to live in Canada: a GIS Approach, Department of Geography, 2001.

Shunxin Wuang, Development of a GIS Service Module.MSC, Geomatics Engineering 2000.

External Committee Member, Richard Lee, GIS in Health Planning, Masters Thesis, Department of Health Science, 1999.

External Committee Member, Lisa Mun-Tu Leung has written a thesis that documents her work on the production, Crime on Goat Island, Masters Thesis, Department of Dramatic Arts, 1999.

External Committee Member, Terry M. Woods, A GIS model for Health Services, Calgary, Masters Thesis, Geography Department, 1997.

External Committee Member ,Doug Patton, Preference Model for Housing Types, Masters Thesis, Civil Engineering (Transportation Planning) Engineering, 1997.

External Committee Member, Shui Liu, Object Orientation in Route Guidance Systems, Masters Thesis, Geomatics Engineering, 1996.

External Committee Member, Mr. Qian, Building 3D GIS by Object Orientation, Masters Thesis,

Geomatics Engineering, 1996.

External Committee Member, Donna Delparte, Applying Geographic Information Systems (GIS) to Protected Areas Management in the Milk River Natural Area and the Kennedy Coulee Ecological Reserve, Masters Thesis, Geography Department, 1996.

### PhD Supervisor (CMD) Graduated

Ovo Adgaha, PhD Candidacy, A Socio-Technical Approach to Designing a Visual Analytics Decision Support Tool for Wind Farm Placement Planning in Alberta, Dec., 2015, Supervisor.

Katayoon Etemad, Graph Visulaization Inspired by Alternative Aesthetics, PhD, CMD Program, April 17, 2015, Co-Supervisor.

Rojin Vishkaie, Sketchboard: Conceptualizing Interactive Communication Media for the Design Review Process, 2014, Co-Supervisor.

Douglas MacLeod, The Architecture of Cyberspace, Designing a Space of Social Exchange, 2011.

#### PhD Supervisor (CMD) In progress

Laruel Johannesson, PhD Candidacy, March 25, 2013.

Lindsay MacDonald, PhD Candidacy, Oct 10, 2014.

Keith, Robinson, PhD Candidacy, March 8, 2013

Rozhen Mohammed-Amin, Candidacy Exam September 28, 2012. (Withdrew from CMD), Committee Member 2015

Farzan baradaran Rahimi, 2014-.

#### PhD (CMD) Committee Member In progress

Salman Khalili, Candidacy Exam June 10, 2014

#### PhD Supervisor (EVDS)In progress

Feng Wordsworth, 2015-

#### PhD Committee Member (EVDS)

Delaney Boyd EVDS, PhD Candidacy, April 30, 2013.

Niel, Gledhil, PhD Candidacy, March 28, 2013

Maha AbuHafeetha, EVDS, PhD Candidacy, June 12, 2012, Defense July 11, 2014.

Karim, Youssef, EVDS, PhD Candidacy, October 22, 2012.

Anas Almujhair, PhD Candidacy, EVDS, April 12, 2012.

Andrew Butt, The Visual Content of Environmental Impact Assessments, Interdisciplinary

Program PhD Candidacy Exam, November 1, 2010, PhD Defense May 12, 2014

Mostafa Sabbagh, PhD Candidacy Exam, June 19, 2009.

Tareq Baker, EVDS, PhD Candidacy Exam, June 5, 2009

Zhen Tian, EVDS, PhD Candidacy Exam August 12, 2008

James Henderson, An Approach to Groundwater Resources Assessment as a Tool for Water Management as a Tool for Water Management on Small Islands, Sept 19, 2008

## PhD Committee Member (External)

Ted Slone, Department of Psychology, The Cognitive, Behavioural, and Neural Effects of Environmental Complexity During Navigation, Aug 26, 2016, Committee Member.

Michael Maloney, Re-imagining Shipboard Societeis: A Spatial Appracoh to Analyzing Ships of the Britsh Royal Navy during the 18<sup>th</sup> and 19<sup>th</sup> Centuries, defense, July 29, 2015. Committee Member.

Timothy Ben Davison, PhD Candidacy Exam, Department of Computer Science, June 17, 2015, Examiner.

Masha Amini Tareh, An integrated software environment for object-based cellular automata: an application to the study of land-use changes, PhD Candidacy Exam, Department of Geomatics Engineering, May 7, 2015, Committee Member.

Kamaran Ali Noori, PhD Candidacy, CMD Program, Exam Sept 22, 2014, Examiner. Karim Youssef, Gated-ness, income segregation and neighbourhood cohesion in two Western Canadian metropolises, PhD, Faculty of Environmental Design, January 12, 2015, Examiner.

Steven Longay, Interactive Procedural Modelling of trees and Landscapes, PhD, Department of Computer Science, August 15, 2014, External Examiner

John Heeream, PhD Candidacy, Interdisciplinary Graduate Program, August 1, 2013, Examiner.

Uta Hinrichs, Open-Ended Explorations in Exhibitions Spaces: A Case for Information Visualization and Large Direct-Touch Displays, Department of Computer Science, Dec. 16, 2013, Examiner

Tareq Ali Baker, Field Evaluation of an Underfloor Air Distribution Systems in an Office Building, PhD, Faculty of Environmental Design, Dec. 12, 2013, Examiner

Ghanam Yaser, An Agile Framework for Variability Management in Software Product Line Engineering, CPSC, August 29, 2011, Examiner,

John Broz, The Flexible Projection Framework, Department of Computer Science, April 4, 2010.

Majeed Pooynadeh, Systems Theory, PhD Candidacy Exam, Department of Geomatics, September 13, 2010.

Michael Kieser, Department of Geomatics, Jan 19, 2010.

Dae-Won Kwon, Development and Application of an Urban Geographic Information System for Traffic Safety, Interdisciplinary Graduate Program, thesis defense, May 10, 2010.

Andrew, Butt, Candidacy Exam, IGG, November 1, 2010

Taranisia Feroza Maccannell, An Epidemilogic Investigation into Risk Factors for Methcillin-Resistant Staphylcococcus Aureus (MRSA) Transmission among Acute care Patients in the Calgary Health Region 2001-2006. A Novel use of Geographic Information Systems (GIS) Technology, Depatement of Health Sciences, Aug. 5, 2009.

Taylor Oetelaar, An Investigation of Roman Bath Buildings Using Computational Fluid Dynamics, Depatment of Mechanical Engineering, June, 2009.

Javad Sadeghi, CPSC Candidacy Exam, April 30, 2009

Gang Chen, Department of Geography, Candidacy Exam, Sept. 15, 2008

Sebastian von Mammen, "Constructive Artificial Swarms, Complex Innovation in Art, design and Architecture", July 23, 2008.

Shyba, Lori, Multidisciplinary Program, PhD Defense, June 27, 2008

Katrin Becker, Department of Education, "The Invention of Good Games: Understanding Learning Design in Commercial Video Game," February 6, 2008.

Mohamed Kassab, PhD Candidacy Exam, EVDS, August 12, 2005, defense Nov 20, 2007.

Lori Shyba, Games and HIC, user control and display in the Theatre, Department of Computer Science. (external member), 2006.

Zhen Tian, PhD Candidacy Exam, Department of Geomatics Engineering, defense August 12, 2005. (external member).

Dae-won Kwon, Pre-Candidacy Meeting, Department of Geography, defense, Oct 2005. (external member).

Marcin Pilat, PhD Candidacy Exam, Department of Computer Science, defense, Dec. 14, 2005. (external member).

Mudiyanselage chaminda Basnayake, Automated Traffic Incident Detection Using GPS Based Transit Probe Vehicles. Defense, June 30, 2004 (external member).

Lars Muendermann, Exam, Inverse Modeling of Plants, defense, November 12, 2003 (external member).

Robert Murray Arthur, Spatial and Temporal Analysis of Traffic Collisions, Department of Geography, defense, Dec. 6, 2002 (external member).

Jim Henderson (PhD candidate), Committee Member ( in progress).

Susan Stremlaw, Sustainable Tourism Development and Community Based Planning in Northern Ontario, University of Calgary (Dean's appointed member).

Samuel, S. Afolayan, Decision Support Techniques for Sustainable Community, Design: Developing a Sustainable Community Design Evaluation Methodology, Ph.D. Thesis, Faculty of Architecture, University of Manitoba, defense, 2001 (external member).

Mech Modeling and Simulation of the Interaction of Plants with the Environment using L-Systems and their Extensions, Ph.D. Thesis, Computer Science, University of Calgary, defense, 1997 (external member).

# SERVICE

## **University Administration and Service**

#### Faculty

Search Committee, Position in Urban Planning, EVDS, University of Calgary 2013

Admissions Committee, Planning Program 2011-15.

Acting Director, Computational Media Design, 2009-2010.

Co-Director, Computational Media Design, 2008-2009, 2011-15.

Search Committee, Cenovus Chair in the Environment, 2009.

Director, Computer Lab, EVDS, University of Calgary, 1995, 1997-2011

Director, Real Estate Development Program, 2005-

Program Coordinator, Planning Program, University of Calgary, 1997 – 98, 2002-03, 2004-6. Acting Program Coordinator, Planning Program, University of Calgary, 2007.

Faculty Promotions Committee, EVDS, University of Calgary, 1995, 1996, 1999, 2000, 2001, 2003, 2003, 2005, 2006, 2008.

Search Committee, Position in Urban Planning, EVDS, University of Calgary, 2007.

Search Committee, Position in Environmental Science, EVDS, University of Calgary, 2007.

Search Committee, Position in Urban Planning, EVDS, University of Calgary, 2001.

Search Committee, Position in Industrial Design EVDS, University of Calgary, 2000-2001.

Search Committee, International Development Planner, EVDS, The University of Calgary, 1999.

Search Committee, Chair, Physical Planning, EVDS, The University of Calgary, 1998.

Search Committee, Chair, Urban and Regional Landscape Design, EVDS, The University of Calgary, 1998.

Search Committee, Dean, EVDS, The University of Calgary, 1998.

Search Committee, Environmental Science, EVDS, The University of Calgary, 1998.

Dean's Search Committee, EVDS, University of Calgary 1997-98.

Search Committee, Position in Urban Design, EVDS, University of Calgary, 1997.

Faculty Advisor, EVDS Web, University of Calgary, 1998-

Program Coordinator, Planning Program, University of Calgary, 1997 – 98 (Co-chair, 99-)

Webmaster, EVDS, University of Calgary, 1995 – 1997

Capital Budget Committee, EVDS, University of Calgary, Member, 1993 -.

Research Committee, EVDS, University of Calgary, Member, 1997-99.

Computer Committee, EVDS, University of Calgary, Member, 1992 -.

Building Committee, EVDS, University of Calgary, Member, 1992.

Admissions Committee, EVDS, University of Calgary, Member, 1992-93. 1998, 1999.

Student Program Committee EVDS, University of Calgary, Member, 1992-96.

J. P. Waugh Traveling Scholarship Committee, Member, 1992, 2002.

#### University

Board Member, Executive Steering Committee, Advanced Visualization, MACIE, The University of Calgary, 1999-2006.

TUCFA 1999-2001.

GFC Information Resources, The University of Calgary 2000 -2002.

Learning Commons Fellowship Committee, 2002.

Search Committee, GIS, Department of Geomatics Engineering, The University of Calgary, 2002.

Search Committee, GIS, Department of Geography, The University of Calgary, 2000

Calgary Director, Legacy 2005, University of Calgary, 1997-2000.

Search Committee, Position in Water Management, EVDS and Department of Civil Engineering, University of Calgary, 1997.

GIS Group, University of Calgary, Co-Chair, 1993-95.

#### Community/Professional Service

Virtual Reality as a tool in Urban Planning, Presentation to Chancellor's Club, University of Calgary, October 18, 2012

Panel Participant, Real Property Roundtable, Invitation by Hon. Rona Ambrose, Minister of Public Works and Government Services Canada Calgary, July 3, 2012.

Planning Advisor, Windsor Park Community Association, 1998-2000.

Lake Front Committee, Geneva, Board Member, 1991 - 1992.

Lake Front Design Review Sub-Committee, Member, 1991 - 1992.

Geneva Commercial Design Advisory Team, Member, 1988-92, Chairman.

Geneva Chamber of Commerce, Ex-officio Member, 1991 - 1992.

Geneva Business Recruitment Committee, Chairman, 1991 - 1992.

Hobart & William Smith Colleges, Geneva, NY, College-Community Committee, Member, 1991 - 1992.

# Community Out-Reach International

Visiting Lecturer, School of Architecture and Planning, King Saud University, Real Estate Development and Finance, Feb. 15-19, 2015.

Guest Lecturer, Department of the Environment, Siem Reap, Cambodia, GIS Remote Sensing and Computer Visualization: Tools for Planning and Design, Nov. 27, 2000.

Guest Lecturer, Asian Institute of Technology and Klunghorn University, Bangkok, Thailand, Computer Visualization: Historic Preservation and Urban Management, CIDA Funded Project, Nov. 22, 1999.

Guest Lecturer, Klunghorn University, Bangkok, Thailand, Computer Visualization an Urban planning and Management, CIDA Funded Project, Nov. 1999

Professional Consultation, Director of the Phimai Archaeological Museum, Thailand, CIDA Funded Project, Nov. 25, 1999.

Delivered a demonstration in cooperation with HBT Agra, Calgary for the Ministry of Environmental Protection, Kyrgyzstan, on GIS and Environmental Management, Dec. 3, 1996.

Organized a lecture series for visiting Chinese Planning Officials, as part of a workshop sponsored by the Shanghai Government on GIS in Urban Planning. Contributors included: J.D. Liang, Alberta Research Council; Doug Olsen, Olsen & Associates; Hal Hamilton, Golder Associates; Duane Johnson, HBT Agra and Richard Levy, Sept 18, 1996.

Organized a lecture series for visiting Chinese Mayors, as part of a workshop sponsored by FCCIA on GIS in Urban Planning. Contributors included: Ron Li, Nigel Waters, and Jim Francisco. Richard Levy, Computer Visualization in Urban Planning, Oct. 24, 1995.

#### **Canadian and US**

University School Program, "What is Virtual Reality", June 3, 2014.

University School Program, "What is Virtual Reality", June 10, 2013.

University School Program, What is Virtual Reality" May 15, 2012.

National Defence of Canada, Virtual Reality for Physiological Testing, Jan 13, 2013.

Virtual Reality and Urban Design, Demo, Chancellor's Club, October 18, 2012

Traditional Knowledge Demo and Discussion, Inuit Elders from Nanavut, Dec. 2010.

3D Demo of Planned Eco-Communities in Chile and Bolivia, in conjunction with Barry Pendergast, Architect, for the Neufeld Foundation, Calgary, October 9, 2010.

University School Program, Keeler Elementary School, "What is Virtual Reality" May 19, June 3, June 10, 2010.

University School Program, Keeler Elementary School, "What is Virtual Reality" June 10, 2009.

3D Demo Days, The Use of Virtual Reality in Urban Design, Architecture, Historic Preservation,. -Centre, CIT, May 14, 2009.

Banded Peak Middle School, Bragg Creek Alberta, "Games and Virtual Reality, April 2008.

Shad Valley Project, Introduction to Urban Design: Virtual Reality, July 12, 2006.

The Use of Virtual Reality in Urban Design, Architecture, Historic Preservation and Tourism, March 6 & 7, 2006, School of Travel Industry Management, University of Hawaii.

Calgary UE October Meeting, VR CAVE at the ICT Building, October 26th - 4:45 PM Dr. Peter Dawson, Department of Archaeology, University of Calgary and Dr. Richard Levy, Faculty of Environmental Design, Virtual Reality and Visualization, Oct 26, 2005, http://uegroup.blogspot.com/2005/10/group-meeting-oct-vr-cave-at-ict.html

Shad Valley Project, Introduction to Urban Design: Design of Regional Shopping Malls, July 15, 2004.

Virtual Environments for Education, Ministry of Learning, Alberta, given at the University of Calgary, June 27, 2003.

Modeling of Architectural and Archaeological sites, University of Calgary, Campus Fair, June 21, 2003.

Virtual Reality and Historic Resource Management, Calgary Civic Trust, Annual General Meeting, June 14, 2003.

Laser Scanning and Historic Preservation, Calgary Civic Trust , Calgary, March 4, 2003

Virtual Reality Demonstration, Virtual Reality Model a Tool for Urban Design, for Directors and Senior Planners from the City of Calgary, June 27, 2002.

Virtual Reality Demonstration, Virtual Reality Model of a Inuvialuit Traditional Sod House, for

Charles Arnold, Director, Prince of Wales Northern Heritage Centre, Yellowknife, Dec. 5, 2001.

Shad Valley Project, Kidspace: Using VR as an Interactive Design Tool, July 10-14, 1999.

Meetings with members of Windsor Park Community on the impact of Transitional Zoning, City of Calgary, 1998-99.

Review of Proposed Zoning and Architectural Guidelines, Architects Focus Group, Town of Canmore, Jan 5, 1998.

Town Council, Computer Modeling for Decision Making, Town of Banff, March 27, 1995 Nov. 15, 1995.

The Use of GIS as a tool in Urban Design, Planning Department, City of Calgary, July 2, 1995.

Shad Valley Project, Introduction to Town Planning: Design of a Town Centre, July 10-14, 1995.

Academic Advisor, Earthwatch, Mountain Town with a Vision, Jenny Feick, principal investigator, 1994.

An Introduction to Urban Planning and Economic Development, Earthwatch, Mountain Town with a Vision, June 24, July 23 1994.

GIS and CAD as a Management Tool, CODA, Calgary, Alberta, April 13, 1994.

GIS and Municipal Management, Council Chambers, MD of Foothills, April 7, 1994.

New York State Urban Council, Inc. Managing a Small Business Improvement District - In a Big Way, Elmira, NY, May, 15, 1992.

Preservation Network Steering Committee, Landmarks Society of Western New York, Geneva Representative, 1990 - 1992.