Ryo Suzuki Curricumlum Vitae

University of Calgary iLab
MS 680, 2500 University Drive NW
Calgary, Alberta, Canada T2N1N4

http://ryosuzuki.org
ryo.suzuki@ucalgary.ca
+1 (403) 220-6015

Research Interest

I am an Assistant Professor in the Department of Computer Science at the University of Calgary. My research focus lies in the **intersection between human-computer interaction and robotics**. I have developed a novel tangible user interface made of swarm and soft robots, leveraging techniques from both robotics and HCI. The goal of my research is to *make the physical environment more adaptive and programmable with the distributed ubiquitous robots at all scales* (i.e., from mm- to m-scale).

keyword: tangible interface, swarm robots, soft robots, augmented reality

Employment

01/2021 – **University of Calgary**
Assistant Professor, Department of Computer Science
Human-Computer Interaction Group
Director of Programmable Reality Lab

05/2020 – 08/2020 **Microsoft Research, Redmond**
Research Intern in EPIC Group
with Mar Gonzalez-Franco, Eyal Ofek, Mike Sinclair, Andy Wilson, Ken Hinckley

08/2015 – 05/2020 **University of Colorado Boulder**
Research Assistant in Department of Computer Science and ATLAS Institute
with Daniel Leithinger, Mark D. Gross, Tom Yeh

05/2019 – 08/2019 **Adobe Research, Seattle**
Research Intern in Creative Intelligence Lab
with Rubaiat Habib, Li-Yi Wei, Stephen DiVerdi, Wilmot Li

12/2017 – 10/2018 **University of Tokyo**
Research Intern in JST ERATO
with Yasuaki Kakehi, Yoshihiro Kawahara, Ryuma Niiyama

05/2016 – 08/2016 **UC Berkeley**
Research Intern in BiD Group
with Bjoern Hartmann, Gustavo Soares, Elena Glassman

05/2015 – 08/2015 **Stanford University**
Research Intern in HCI Group
with Michael Bernstein

09/2014 – 05/2015 **University of Tokyo**
Research Assistant in IIS Lab
with Koji Yatani

01/2015 – 03/2015 **AIST, Tsukuba**
Research Intern in Media Interaction Group
with Jun Kato, Masataka Goto

Education

08/2015 – 07/2020 **University of Colorado Boulder**
Ph.D. candidate in Human-Computer Interaction, Department of Computer Science

PhD Dissertation: Dynamic Shape Construction and Transformation with Collective Elements
Committee: Daniel Leithinger, Mark D. Gross, Hiroshi Ishii, Takeo Igarashi, Tom Yeh

04/2011 – 03/2013 **University of Tokyo**
M.A. in Computational Game Theory, Department of Economics

Thesis: Diffusion Process and Take-off Conditions of Online Platforms
Advisor: Michihiro Kandori

04/2007 – 03/2011 **Tokyo Institute of Technology**
B.Eng in Information and Social Science, School of Engineering

Peer-Reviewed Conference Publications

Quick summary since 2016: First Author (12), Awarded Paper (2), CHI (4), UIST (4), IROS (1), ICSE (1), ASSETS (1), and other venues (5). 570 citations and 12 h-index since 2016, based on Google Scholar (as of 08/2021) [a]

[a] https://scholar.google.com/citations?user=klWjaQIAAAAJ

[C16] **Ryo Suzuki**, Eyal Ofek, Mike Sinclar, Daniel Leithinger, Mar Gonzalez-Franco. HapticBots: Distributed Encountered-type Haptics for VR with Multiple Shape-changing Mobile Robots. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2021. (**UIST '21**, acceptance rate: 25%)

[C15] **Ryo Suzuki**, Rubaiat Habib, Li-Yi Wei, Stephen Diverdi, Wilmot Li, Daniel Leithinger. RealitySketch: Embedding Responsive Graphics and Visualizations in AR through Dynamic Sketching. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2020. (**UIST '20**, acceptance rate: 21%)
Honorable Mention Paper Award (top 5%)

[C14] Hooman Hedayati, **Ryo Suzuki**, Daniel Leithinger, Daniel Szafir. PufferBot: Actuated Expandable Structures for Aerial Robots. *In Proceedings of 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems*. IEEE, 2020 (**IROS '20**, acceptance rate: 47%)

[C13] **Ryo Suzuki**, Hooman Hedayati, Clement Zheng, James Bohn, Daniel Szafir, Ellen Yi-Luen Do, Mark D. Gross, Daniel Leithinger. RoomShift: Room-scale Dynamic Haptics for VR with Furniture-moving Swarm Robots. *In Proceedings of the ACM CHI Conference on Human Factors in Computing Systems*. ACM, 2020. (**CHI '20**, acceptance rate: 24%)

[C12] **Ryo Suzuki**, Ryosuke Nakayama, Dan Liu, Yasuaki Kakehi, Mark D. Gross, Daniel Leithinger. LiftTiles: Constructive Building Blocks for Prototyping Room-scale Shape-changing Interfaces. *In Proceedings of the ACM International Conference on Tangible, Embedded and Embodied Interaction*. ACM, 2020. (**TEI '20**, acceptance rate: 28%)

[C11] **Ryo Suzuki**, Clement Zheng, Yasuaki Kakehi, Tom Yeh, Ellen Do, Mark D. Gross, Daniel Leithinger. ShapeBots: Shape-changing Swarm Robots. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2019. (**UIST '19**, acceptance rate: 24%)

[C10] Ryosuke Nakayama*, **Ryo Suzuki***, Satoshi Nakamaru, Ryuma Niiyama, Yoshihiro Kawahara, Yasuaki Kakehi. (* equally contributed) MorphIO: Entirely Soft Sensing and Actuation Modules for Programming Shape Changes through Tangible Interaction. *In Proceedings of the ACM Conference on Designing Interactive Systems*. ACM, 2019. (**DIS '19**, acceptance rate: 25%)
Best Paper Award (top 1%)

[C9] **Ryo Suzuki**, Junichi Yamaoka, Daniel Leithinger, Tom Yeh, Mark D. Gross, Yoshihiro Kawahara, Yasuaki Kakehi. Dynablock: Dynamic 3D Printing for Instant and Reconstructable Shape Formation. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2018. (**UIST '18**, acceptance rate: 20%)

[C8] **Ryo Suzuki**, Koji Yatani, Mark D. Gross, Tom Yeh. Tabby: Explorable Design for 3D Printing Textures. *In Proceedings of the Pacific Conference on Computer Graphics and Applications*. Eurographics Association, 2018 (**PG '19**, acceptance rate: 26%)

[C7] **Ryo Suzuki**, Jun Kato, Mark D. Gross, Tom Yeh. Reactile: Programming Swarm User Interfaces through Direct Physical Manipulation. *In Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, 2018. (**CHI '18**, acceptance rate: 25%)

[C6] Hyunjoo Oh, Tung D. Ta, **Ryo Suzuki**, Mark D. Gross, Yoshihiro Kawahara, Lining Yao. PEP (3D Printed Electronic Papercrafts): An Integrated Approach for 3D Sculpting Paper-based Electronic Devices. *In Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, 2018. (**CHI '18**, acceptance rate: 25%)

[C5] **Ryo Suzuki**, Abigale Stangl, Mark D Gross, Tom Yeh. FluxMarker: Enhancing Tactile Graphics with Dynamic Tactile Markers. *In Proceedings of the International ACM SIGACCESS Conference on Computers and Accessibility.* ACM, 2017. (**ASSETS '17**, acceptance rate: 26%)

[C4] **Ryo Suzuki**, Gustavo Soares, Andrew Head, Elena Glassman, Ruan Reis, Melina Mongiovi, Loris D'Antoni, Bjoern Hartmann. TraceDiff: Debugging Unexpected Code Behavior Using Trace Divergences. *In Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing*. IEEE, 2017. (**VL/HCC '17**, acceptance rate: 29%)

[C3] Andrew Head, Elena Glassman, Gustavo Soares, **Ryo Suzuki**, Lucas Figueredo, Loris D'Antoni, Bjoern Hartmann. Writing Reusable Code Feedback at Scale with Mixed-Initiative Program Synthesis. *In Proceedings of the ACM Conference on Learning at Scale*. ACM, 2017. (**L@S '17**, acceptance rate: 22%)

[C2] Reudismam Rolim, Gustavo Soares, Loris D'Antoni, Oleksandr Polozov, Sumit Gulwani, Rohit Gheyi, **Ryo Suzuki**, Bjoern Hartmann. Learning Syntactic Program Transformations from Examples. *In Proceedings of the International Conference on Software Engineering*. IEEE, 2017. (**ICSE '17**, acceptance rate: 19%)

[C1] **Ryo Suzuki**, Niloufar Salehi, Michelle S. Lam, Juan C. Marroquin, Michael S. Bernstein. Atelier: Repurposing Expert Crowdsourcing Tasks as Micro-internships. *In Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, 2016. (**CHI '16**, acceptance rate: 23%)

Peer-Reviewed Demo and Poster Publications

[D13] Hiroki Kaimoto, Samin Farajian, **Ryo Suzuki**. Swarm Fabrication. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2021. (**UIST '21** Student Innovation Contest)

[D12] Martin Nisser, Leon Cheng, Yashaswini Makaram, **Ryo Suzuki**, Stefanie Mueller. Programmable Polarities: Actuating Interactive Prototypes withProgrammable Electromagnets. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2021. (**UIST '21** Demo)

[D11] **Ryo Suzuki**, Eyal Ofek, Mike Sinclar, Daniel Leithinger, Mar Gonzalez-Franco. Demonstrating HapticBots: Distributed Encountered-type Haptics for VR with Multiple Shape-changing Mobile Robots. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2021. (**UIST '21** Demo)

[D10] **Ryo Suzuki**, Rubaiat Habib, Li-Yi Wei, Stephen Diverdi, Wilmot Li, Daniel Leithinger. Demonstrating RealitySketch: Embedding Responsive Graphics and Visualizations in AR through Dynamic Sketching. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2020. (**UIST '20** Demo)
Honorable Mention Best Demo Award (top two demos)

[D9] **Ryo Suzuki**. Collective Shape-changing Interfaces. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2019. (**UIST '19** Doctoral Consortium)

[D8] **Ryo Suzuki**, Ryosuke Nakayama, Dan Liu, Yasuaki Kakehi, Mark D. Gross, Daniel Leithinger. LiftTiles: Modular and Reconfigurable Room-scale Shape Displays through Retractable Inflatable Actuators. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2019. (**UIST '19** Poster)

[D7] **Ryo Suzuki**, Clement Zheng, Yasuaki Kakehi, Tom Yeh, Ellen Do, Mark D. Gross, Daniel Leithinger. Demonstrating ShapeBots: Shape-changing Swarm Robots. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2019. (**UIST '19** Demo)

[D6] **Ryo Suzuki**, Junichi Yamaoka, Daniel Leithinger, Tom Yeh, Mark D. Gross, Yoshihiro Kawahara, Yasuaki Kakehi. Demonstrating Dynablock: Dynamic 3D Printing for Instant and Reconstructable Shape Formation. *In Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2018. (**UIST '18** Demo)

[D5] **Ryo Suzuki**, Gustavo Soares, Elena Glassman, Andrew Head, Loris D'Antoni, Bjoern Hartmann. Exploring the Design Space of Automatically Synthesized Hints for Introductory Programming Assignments. *In Proceedings of the CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, 2017. (**CHI '17** Late-Breaking Work)

[D4] Stanford Crowd Research Collective (For the full author list, please see the publication), Daemo: A Self-Governed Crowdsourcing Marketplace. *In Adjunct Proceedings of the Annual ACM Symposium on User Interface Software and Technology*. ACM, 2015. (**UIST '15** Poster)

[D3] **Ryo Suzuki**. Toward a Community Enhanced Programming Education. *In Proceedings of the CHI Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, 2015. (**CHI '15** Workshop Paper)

[D2] **Ryo Suzuki**, Interactive and Collaborative Source Code Annotation. *In Proceedings of the International Conference on Software Engineering*. IEEE, 2015. (**ICSE '15** Poster)

[D1] **Ryo Suzuki**, Network Thresholds and Multiple Equilibria in the Diffusion of Content-based Platforms. *In Proceedings of the International Conference on Web and Internet Economics*. Springer, 2014. (**WINE '14** Poster)

Awards and Scholarships

Awards

2020 **UIST 2020 Honorable Mention Best Demo Award**

2020 **UIST 2020 Honorable Mention Best Paper Award**

2020 **University of Colorado Boulder Outstanding Research Award in CS**

2019 **DIS 2019 Best Paper Award**

2018 **Google PhD Fellowship Finalist**

2013 **Tech Crunch Disrupt in Tokyo 2013** Finalist

2012 **University of Tokyo Startup Competition** 1st Prize Winner

Scholarship

2015-2020 **CU Boulder Travel Grant** ($500-$1,200 for each conference travel)

2015-2020 **Nakajima Foundation Scholarship** ($120,000 stipend for 5 years and 2 years tuition coverage)

2013-2015 **JSPS Research Fellow DC1** ($72,000 stipend for 2 years)

2011-2013 **JASSO Fellow (Total Exemption for Outstanding Students)** ($20,000 stipend for 2 years)

2010 **Tohso Foundation Scholorship** ($3,600)

Funding

2021 **Ryo Suzuki**. Augmenting In-person Verbal Communication by Adding Interactivity to Transcribed Spoken Words in AR. *Snap, Inc*, Snap Creative Challenge Funding, $15,000
https://www.snapcreativechallenge.com/

2021 **Ryo Suzuki** (for Harrison Chen). Investigating Human-Drone Interaction with VR Simulation. *NSERC*, NSERC USRA, $6,000 CAD

2021 **Ryo Suzuki** (for Colin Au Yeoung). Situated Guidance and Visualization to Support Personal Fabrication Activities. *NSERC*, NSERC USRA, $6,000 CAD

2021 **Ryo Suzuki**. Mixed Reality for IoT and Robotics: Opportunities and Challenges for Immersive Human-Robot Interaction. *Tohoku University*, Tohoku University Research Institute of Electrical Communication, Cooperative Research Projects, $18,000 CAD

2021 **Ryo Suzuki**. *NSERC*, NSERC Discovery Grant Funding, $145,000 CAD

2021 **Ryo Suzuki**. *University of Calgary*, Startup Funding, $100,000 CAD

2019 **Ryo Suzuki**. Adaptive Physical Environments with Distributed Swarm Robots. *Ministry of Internal Affairs and Communications in Japan*, Innovation Research Funding, $30,000
https://www.inno.go.jp/en/

2019 **Ryo Suzuki**. Adobe Gift Funding, $5,000

2018 **Ryo Suzuki**. Dynamic Physical Interfaces. *JST in Japan*, ACT-I Funding for Young Scholars, $30,000 and Mentorship Opportunity (my mentor was Takeo Igarashi)
https://www.jst.go.jp/kisoken/act-i/en/index.html

2018 **Ryo Suzuki**. Programmable Architecture with Soft Inflatable Actuator. *Leave a Nest Foundation in Japan*, Emerging Research Funding for AI and Interdisciplinary Research $5,000

2013-2015 **Ryo Suzuki**. Network-based Diffusion Analysis for Online Community, *JSPS*, KAKENHI Grants-in-Aid for Scientific Research, $40,000

Teaching

Courses

Winter 2022 **CPSC 601: AR/VR and Robotics (Graduate)**
Department of Computer Science, University of Calgary

Fall 2021 **CPSC 581: Human-Computer Interaction II (Undergradate/Graduate)**
Department of Computer Science, University of Calgary

Winter 2021 **CPSC 599/601: Design of Mixed Reality Apps (Undergradate/Graduate)**
Department of Computer Science, University of Calgary

Teaching Assistant

Fall 2019 **CSCI 3002: Fundamentals of Human Computer Interaction (Undergraduate)**
Instructor: Prof. Shaun Kane
Department of Computer Science, University of Colorado Boulder

Spring 2017 **ATLS 6000: Soft Robotics (Graduate)**
Instructor: Prof. Mark D. Gross
ATLAS Institute, University of Colorado Boulder

Fall 2012 **Game and Network Theory (Graduate)**
Instructor: Prof. Michihiro Kandori
Department of Economics, University of Tokyo

Fall 2012 **Dynamic Programming and Optimization (Graduate)**
Instructor: Prof. Kazuya Kamiya
Department of Economics, University of Tokyo

Students

Supervision

09/2020 – present **Neil Chulpongsatorn**
MSc student and Undergraduate research student (CPSC 502 Course)
Mixed Reality and Data Visualization

05/2021 – present **Adnan Karim**
MSc student
AR/VR and Robotics

09/2021 – present **Shivesh Jadon**
MSc student (co-supervised by Wesley Willet)
Social AR and Data Visualization

09/2021 – present **Marcus Friedel**
MSc student (co-supervised by Ehud Sharlin)
VR Haptics

09/2021 – present **Samin Farajian**
MSc student
Digital Fabrication with Swarm Robots

09/2020 – present **Christopher Smith**
MSc student (co-supervised by Ehud Sharlin and Sowmya Somanath)
Modular VR Haptics

05/2021 – present **Tian Xia**
Undergraduate research student (CPSC 502 Course, co-supervised by Ehud Sharlin)
Cross-scale Interactions with AR/VR

05/2021 – present **Colin Au Yeung**
Undergraduate research student (NSERC USRA, co-supervised by Wesley Willet)
Augmented Makrespace

05/2021 – present **Harrison Chen**
Undergraduate research student (NSERC USRA)
Human-Drone Interaction

09/2021 – present **Kaynen Mitchell**
Undergraduate research student (CPSC 502 Course)

09/2021 – present **Nathaniel Habtegergesa**
Undergraduate research student (CPSC 502 Course)

09/2021 – present **Manjot Khangura**
Undergraduate research student (CPSC 502 Course)

Visiting Students

05/2021 – 09/2021 **Curtis Engerdahl**
Summer undergraduate research student (University of Alberta)

05/2021 – 09/2021 **Gurnoor Aujla**
Summer undergraduate research student (University of Calgary)

05/2021 – 08/2021 **Carrie Rong**
Summer undergraduate research student (McGill University)

Thesis Committee

2021 **Brennan Jones**
PhD Thesis Committee (supervisor: Tony Tang)
Title: Designing Remote Collaboration Technologies for Wilderness Search and Rescue

2020 **Kendra Wannamaker**
MSc Thesis Committee (supervisor: Wesley Willett)
Title: Situated Self-Tracking: Ideating, Designing, and Deploying Dedicated User-driven Personal Informatics Systems

Mentoring (During PhD)

2019 **Chrystalina Pharr**
Undergraduate student in Mechanical Engineering
University of Colorado Boulder
Project: ceiling-based swarm robots

2019 **James Bohn**
Undergraduate student in Computer Science
University of Colorado Boulder
Project: furniture-moving swarm robots

2018 **Ryosuke Nakayama**
Master student in Media Design
Keio University (Now Sony)
Project: interactive soft robots and shape-changing inflatable structure

2018 **Takayuki Hirai**
Undergraduate student in Media Design
Keio University (Now Nintendo)
Project: shape-changing swarm robots

2018 **Takumi Murayama**
Undergraduate student in Media Design
Keio University
Project: reprogrammable inflatable architectural structure

2017 **Kevin Kuwata**
Master student in Electrical and Computer Engineering
University of Colorado Boulder (Now Apple)
Project: mm-scale swarm robots with electromagnetic actuation

2017 **Zhixian Jin**
Undergraduate student in Electrical and Computer Engineering
University of Colorado Boulder
Project: tactile feedback with actuated magnetic marker

2016 **Ruan Reis**
Master student in Computer Science
Federal University of Campina Grande
Project: automated hint generation for programming assignment

2015 **Michelle Lam**
Undergraduate student in Computer Science
Stanford University
Project: micro-internship with repurposed crowdsourcing tasks

2015 **Juan Marroquin**
Undergraduate student in Computer Science
Stanford University (Now Microsoft)
Project: micro-internship with repurposed crowdsourcing tasks

2015 **Adam Ginzberg**
Undergraduate student in Computer Science
Stanford University (Now Coda.io)
Project: crowd research

Selected Press Coverage

07/2021 IEEE Computer Graphics and Applications. *Cover Story of "Real Virtual Reality" (vol. 41)*

03/2021 IT Media News. *Evolution of "AR Drawing"? RealitySketch, a sketching technology that works with objects in reality*

10/2020 ACM TechNews. *Pufferfish-inspired robot could improve drone safety*

10/2020 Interesting Engineering. *Pufferfish Mimicking Drones to Improve Aerial Safety*

10/2020 New Atlas. *Drone draws on the pufferfish to protect itself and others*

10/2020 Techable. *University of Colorado researchers unveil 'RoomShift' to move props in VR space in real life*

10/2020 Hackster.io. *Putting the Reality in Virtual Reality*

09/2020 Hackster.io. *PufferBot Is an Aerial Robot That Can Change Shape In-Flight*

09/2020 TechXplore. *RoomShift: A room-scale haptic and dynamic environment for VR applications*

09/2020 Engineering 360. *Team builds drone inspired by the pufferfish*

09/2020 TechXplore. *PufferBot: A flying robot with an expandable body*

09/2020 Yahoo News. *The University of Colorado Announced "RoomShift" where Robot Rearranges Furniture to Create Virtual Spaces in a Realistic Way*

09/2020 IT Media News. *RoomShift: Reconfigurable Environments for Virtual Reality*

02/2020 IT Media News. *Giant whistle module expands the room with the University of Colorado and other "LiftTiles" developments*

01/2020 Arduino Blog. *Prototype room-scale, shape-changing interfaces with LiftTiles*

01/2020 TechXplore. *LiftTiles: Actuator-based Building Blocks for Shape-changing Interfaces*

01/2020 ITMedia News. *A Swarm of Self-transforming Robots to Assist People*

11/2019 Hackster.io. *LiftTiles Turn Walls and Floors Into Reconfigurable Structures on Demand*

11/2019 Element 14. *Engineers Develop LiftTiles, a Scale Shape-changing Interface*

11/2019 Bouncy. *Swarm Robots that can Change Shape to Visualize Data*

10/2019 Hackster.io. *Swarming Robots Can Change Their Configuration to Handle Different Tasks*

09/2019 TechXplore. *ShapeBots: A Swarm of Shape-shifting Robots that Visually Display Data*

09/2019 Hackaday. *Tiny Robots that Grow Taller and Wider*

09/2019 Robotic Gizmo. *ShapeBots: Shape Changing Swarm Robots*

09/2019 Gadgetify. *ShapeBots: Shape Changing Swarm Robots*

10/2018 3DPrint.com. *Dynablock: 3D Prints That Assemble and Disassemble in Seconds*

10/2018 Hackster.io. *The Dynamic 3D Printing That Assembles and Disassembles Objects in Seconds*

10/2018 Arduino Blog. *Create Shapes Over and Over with the Dynablock 3D Printer*

10/2018 3DRuck.com. *Dynablock: Dynamischer 3D-Drucker erstellt Objekte in Sekunden*

10/2018 World Business Satellite (Japanese TV). *Repeatable 3D Printer*

10/2018 Nikkei Newspaper, *Modeling 3D Objects with Magnet-Embedded Blocks*

06/2016 Wired. *It's Not Just Robots: Skilled Jobs Are Going to Meatware*

Invited Talks

03/2021 **From Augmented Reality to Reconfigurable Reality: Towards Seamless Interactions through Both Visually and Physically Programmable Environments**
MIT CSAIL, Boston (hosted by Arvind Satyanarayan)

02/2021 **From Augmented Reality to Reconfigurable Reality: Towards Seamless Interactions through Both Visually and Physically Programmable Environments**
Tsinghua University, Beijin, China (hosted by Zhicong Lu)

12/2020 **Programmable Environments with Distributed Swarm Robots**
Tohoku University, Tohoku, Japan (hosted by Yoshifumi Kitamura)

05/2020 **Programmable Environments with Distributed Swarm Robots**
University of Calgary, Calgary (hosted by Ehud Sharlin)

03/2020 **Programmable Environments with Distributed Swarm Robots**
Virginia Tech, Blacksburg (hosted by Doug Bowman)

03/2020 **Programmable Environments with Distributed Swarm Robots**
UCSB, Santa Barbara (hosted by Misha Sra)

02/2020 **Programmable Environments with Distributed Swarm Robots**
University of Washington, Seattle (hosted by Shyam Gollakota and Jon Froehlich)

02/2020 **Programmable Environments with Distributed Swarm Robots**
Boston University, Boston (hosted by Emily Whiting)

12/2019 **Adaptive Physical Environment with Distributed Swarm Robots**
CU Boulder ATLAS Seminar, Boulder (hosted by Ellen Do)

11/2019 **Adaptive Physical Environment with Distributed Swarm Robots**
MIT CSAIL, Boston (hosted by Stefanie Mueller)

11/2019 **Adaptive Physical Environment with Distributed Swarm Robots**
MIT Media Lab, Boston (hosted by Hiroshi Ishii)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
University of Tokyo, Tokyo, Japan (hosted by Takeo Igarashi)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
University of Tokyo, Tokyo, Japan (hosted by Jun Rekimoto)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
JST ERATO, Tokyo, Japan (hosted by Yoshihiro Kawahara)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
Takram, Tokyo, Japan (hosted by Hisato Ogata)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
ZOZO Research, Tokyo, Japan (hosted by Satoshi Nakamaru)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
Preferred Networks, Tokyo, Japan (hosted by Hironori Yoshida)

10/2019 **Distributed and Collective Robots as Ubiquitous Interfaces**
Omron ScinicX Research Lab, Tokyo, Japan (hosted by Yoshitaka Ushiku)

06/2019 **Real-time Binding between Physical and Digital Worlds**
Adobe Research, Seattle (hosted by Wilmot Li)

10/2018 **Dynamic Physical Media**
CU Boulder ATLAS Seminar, Boulder (hosted by Mark Gross)

06/2016 **Programming Environment for Physical Computing and Mixed Reality Era**
UC Berkeley BiD Seminar, Berkeley (hosted by Bjoern Hartmann)

Service

2020 – present **Program Committee**
CHI 2022
UIST 2021
ISMAR 2021
VRST 2021
TEI 2021, 2022
GI 2020

2021 – present **Journal Editorial Board**
ACM Transactions of Human-Robot Interaction
Frontiers in Virtual Reality Haptics

2016 – present **Organizing Committee**
UIST '21 Student Innovation Contest Chair
CHI '21 Social Media Chair
CHI '21 Student Research Competition Jury
UIST '16 Web and Social Media Chair

2016 – present **Reviewer**
CHI 2016 - 2021
UIST 2016 - 2021
IMWUT 2021
ISS 2021
ISMAR 2020 - 2021
VRST 2020 - 2021
CSCW 2021
TOCHI 2020
PACM 2021
DIS 2021
C&C 2021
IEEE VR 2020
VL/HCC 2020
GI 2020
SCF 2019
SIGGRAPH ETech 2018 - 2021

Total about 100 reviews.
6 Outstanding Reviews at CHI/UIST

2016 – 2017 **Student Volunteer**
CHI 2017
UIST 2016

2021 **Faculty Hiring Committee**
University of Calgary

References

- **Daniel Leithinger**
Assistant Professor
University of Colorado Boulder, ATLAS Institute
daniel.leithinger@colorado.edu

- **Mark D. Gross**
Director
University of Colorado Boulder, ATLAS Institute
mdgross@colorado.edu

- **Hiroshi Ishii**
Jerome B. Wiesner Professor and Associate Director
MIT Media Lab
ishii@media.mit.edu

- **Takeo Igarashi**
Professor
University of Tokyo, Department of Computer Science
takeo@acm.org

- **Bjoern Hartmann**
  Associate Professor
  UC Berkeley, Department of Electrical Engineering and Computer Science
  bjoern@eecs.berkeley.edu

- **Tom Yeh**
  Associate Professor
  University of Colorado Boulder, Department of Computer Science
  tom.yeh@colorado.edu

- **Rubaiat Habib**
  Senior Research Scientist
  Adobe Research
  rhabib@adobe.com