# Ryo Suzuki

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DLC 170, University of Colorado Boulder, Boulder CO 80302

## EDUCATION

**Ph.D student in Computer Science, University of Colorado Boulder** *August 2015 - Present*
Advisor: Daniel Leithinger and Mark D. Gross

**M.A, University of Tokyo** *March 2013*
Advisor: Koji Yatani and Kandori Michihiro
GPA: 3.9, Top 5% (A+) in Machine Learning, Microeconomics, and Macroeconomics

**B.Eng, Tokyo Institute of Technology** *March 2011*
GPA: 3.9

## RESEARCH EXPERIENCE

**Adobe Research, Creative Intelligece Lab** *May 2019 - August 2019*
Rubaiat Habib, Li-Yi Wei, Stephen Diverdi, Danny Kaufman

**University of Colorado Boulder, THING Lab** *August 2015 - Present*
Daniel Leithinger, Mark D. Gross, and Tom Yeh

**University of Tokyo, JST ERATO** *December 2017 - October 2018*
Yasuaki Kakehi and Yoshihiro Kawahara

**UC Berkeley, BiD Group** *May 2016 - August 2016*
Bjoern Hartmann

**Stanford University, HCI Group** *May 2015 - August 2015*
Michael S. Bernstein

**University of Tokyo, IIS-Lab** *September 2014 - May 2015*
Koji Yatani

**AIST, Media Interaction Group** *January 2015 - March 2015*
Jun Kato

## PUBLICATIONS

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

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."*, Proceedings of The ACM Conference on Designing Interactive Systems. ACM, 2018. (DIS'19, acceptance rate: 25%, **Best Paper Award: Top 1%**)

**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."*, Proceedings of the ACM Symposium on User Interface Software and Technology. ACM, 2018. (UIST'18, acceptance rate: 20%)

**Ryo Suzuki**, Koji Yatani, Mark D. Gross, Tom Yeh, *"Tabby: Explorable Design for 3D Printing Textures."*, Proceedings of the Pacific Conference on Computer Graphics and Applications, 2018 (Pacific Graphics'18, acceptance rate: 26%)

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

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."*, Proceedings of the CHI Conference on Human Factors in Computing Systems. ACM, 2018. (CHI'18, acceptance rate: 25%)

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

**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."*, Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing. IEEE, 2017. (VL/HCC'17, acceptance rate: 29%)

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."*, Proceedings of the ACM Conference on Learning at Scale. ACM, 2017. (L@S'17, acceptance rate: 22%)

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

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

## POSTERS, DEMOS, AND WORKSHOP PAPERS

**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."*, Proceedings of the CHI Conference on Human Factors in Computing Systems. ACM, 2017. (CHI'17 Late-Breaking Work)

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

**Ryo Suzuki**, *"Toward a Community Enhanced Programming Education."*, Proceedings of the CHI Conference on Human Factors in Computing Systems. ACM, 2015. (CHI'15 Workshop)

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

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

## AWARDS AND HONORS

**JST ACT-I Funding (Mentor: Takeo Igarashi)** *October 2018*
**Leave a Nest Fellowship** *October 2018*
**Nakajima Foundation Scholarship** *November 2014*
**KAKENHI Grants-in-Aid for Scientific Research** *April 2013*
**JSPS Research Fellow DC1** *April 2013*
**JASSO Fellow (Total Exemption for Particularly Outstanding Students)** *March 2013*
**Tohso Foundation Scholorship** *April 2010*

**Business Model Competition Japan 2014 Microsoft Award** *February 2014*
**Tech Crunch Disrupt Tokyo 2013 Finalist** *November 2013*
**1st Prize Winner of University of Tokyo Entrepreneur Dojo** *October 2012*

## TEACHING EXPERIENCE

**Teaching Assistant at University of Colorado Boulder** *January 2017 - May 2017*
Soft Robotics for Prof. Mark D. Gross

**Teaching Assistant at University of Tokyo** *October 2012 - February 2013*
Microeconomic Policy (Graduate) for Prof. Dan Sasaki

**Teaching Assistant at International Christian University** *October 2012 - February 2013*
Statistics (Undergraduate) for Prof. Takuya Kaneko

**Teaching Assistant at University of Tokyo** *April 2012 - August 2012*
Mathematics II (Graduate) for Prof. Kazuya Kamiya

**Teaching Assistant at Tokyo Institute of Technology** *October 2010 - February 2011*
Advanced Macroeconomics (Graduate) for Prof. Takumi Naito

## TECHNICAL SKILLS

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|---|---|
| **Programming Languages** | Node.js/JavaScript, C/C++, Python, Ruby, Objective-C |
| **Development Framework** | OpenGL, WebGL, OpenCV, Tensorflow, React |
| **Tools** | OnShape, Solidworks, Adobe Illustrator, Adobe After Effects |
| **Electronics** | Altium Designer, Eagle |