Jasper Tran O'Leary

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Education

UNIVERSITY OF WASHINGTON

Ph.D. Human Centered Design and Engineering.
Advisor: Nadya Peek.
September 2017 to Present.

UNIVERSITY OF CALIFORNIA, BERKELEY

B.A. Computer Science.
January 2013 to December 2016.

Publications

CONFERENCES (FULLY REVIEWED, ARCHIVAL)

Jubilee: an Extensible Machine for Multi-Tool Fabrication
Joshua Vasquez, Hannah Twigg-Smith, *Jasper Tran O'Leary*, Nadya Peek
To appear at CHI '20: ACM Conference on Human Factors in Computing Systems

Who Gets to Future? Design Methods, Race, and Representation in Africatown
Jasper Tran O'Leary, Sara Zewde, Jennifer Mankoff, Daniela K Rosner
CHI '19: ACM Conference on Human Factors in Computing Systems

Charrette: Supporting In-Person Discussions around Iterations in User Interface Design
Jasper O'Leary, Holger Winnemöller, Wilmot Li, Mira Dontcheva, Morgan Dixon
CHI '18: ACM Conference on Human Factors in Computing Systems

Exploring Light as Material: Computational Design and Fabrication of Secondary Optics for Illumination Aesthetics
Cesar Torres, *Jasper O'Leary*, Molly Nicholas, Eric Paulos
CHI '17: ACM Conference on Human Factors in Computing Systems
BEST PAPER AWARD (Top 1% of Submissions)

Aesthetic Electronics: Designing, Sketching, and Fabricating Circuits through Digital Exploration
Joanne Lo, Cesar Torres, Isabel Yang, *Jasper O'Leary*, Danny Kaufman, Wilmot Li, Mira Dontcheva, Eric Paulos
UIST '16: ACM Conference on User Interface Software and Technology

EXTENDED ABSTRACTS AND WORKSHOPS (LIGHTLY REVIEWED)

Machine-o-Matic: a Programming Environment for Prototyping Digital Fabrication Workflows

Jasper Tran O'Leary and Nadya Peek

PLATEAU '19: 10th Annual Workshop on the Intersection of HCI and PL — Paper

Machine-o-Matic: a Programming Environment for Prototyping Digital Fabrication Workflows

Jasper Tran O'Leary and Nadya Peek

UIST '19: ACM Symposium on User Interface Software and Technology — Demonstration

Material Flow in Makerspaces

Jasper O'Leary and Nadya Peek

ISAM '18: International Symposium on Academic Makerspaces — Poster

3D Printing Self-Unmaking Objects

Jasper O'Leary

CHI '18: Workshop on Making Use of Non-Deterministic Art Practices in HCI

LiveObjects: Leveraging Theatricality for an Expressive Internet of Things

Cesar Torres, *Jasper O'Leary,* Eric Paulos

DIS '16: ACM Conference on Designing Interactive Systems — Demonstration

UNPUBLISHED

Machine-o-Matic: a Programming Environment for Prototyping Digital Fabrication Workflows

Jasper Tran O'Leary and Nadya Peek

Planned submission to UIST '20

PATENTS

Integrated Computing Environment for Managing and Presenting Design Iterations
Jasper O'Leary, Holger Winnemöller, Wilmot Li, Mira Dontcheva, Morgan Dixon.
US Patent Pending.

Research Experience

GRADUATE RESEARCH ASSISTANT
With Nadya Peek, Human Centered Design and Engineering.
Fall 2017 to Present.
University of Washington. Seattle, WA.

ADOBE RESEARCH INTERN
With Holger Winnemöller, Wilmot Li, Morgan Dixon, and Mira Dontcheva.
February 2018 to September 2018.
Adobe Research. Seattle, WA.

UNDERGRADUATE RESEARCH ASSISTANT

With Cesar Torres and Eric Paulos, EECS.

Fall 2013 to Fall 2016.

University of California, Berkeley. Berkeley, CA.

Teaching Experience

CSE 599 H1 TEACHING ASSISTANT

University of Washington. Spring 2019.
- Assisted with PhD level course on circuits, fabrication, and machine learning.
- Set up and maintained instructional makerspace for class projects.

HCDE 439 TEACHING ASSISTANT

University of Washington. Winter 2019.
- Helped implement new curriculum for undergraduate course in physical computing.
- Troubleshooted and consulted with students for interactive circuit design projects.

TECHIN 511 TEACHING ASSISTANT

University of Washington. Fall 2018 and Fall 2019.
- Guided students through the design process for rapid prototyping.
- Taught students to prototype products using various digital fabrication machines.

CS160 HEAD TEACHING ASSISTANT

University of California, Berkeley. Fall 2016.
- Led team of teaching assistants through teaching, instructing on best practices when applicable.
- Worked with instructor to manage logistics for course assignments, projects, and team formation.
- Assessed student understanding and adapt course material as necessary.

CS160 TEACHING ASSISTANT

University of California, Berkeley. Fall 2015 to Spring 2016
- Led and teach discussion sections for CS160: User Interface Design and Development.
- Developed class activities for: Android, Android Wear, Framer.js, Illustrator/Photoshop.
- Guide student groups through project-managing a semester-long UI development project.

CS61A LAB ASSISTANT

University of California, Berkeley. Spring 2014.
- Assisted students with Python programming assignments for introductory CS course.
- Instructed students on: enforcing abstraction barriers, writing clean code, and debugging.

Awards

BEST PAPER (TOP 1%) – CHI 2017

Paper: Exploring Light as Material: Computational Design and Fabrication of Secondary Optics for Illumination Aesthetics.

Summer Undergraduate Research Fellow, UC Berkeley

Topic: Designing Spatial Interactions for the Internet of Things. Summer 2015.

Service

Web Co-Chair

UIST '20

Reviewer

CSCW Papers '19. CHI Late-Breaking Work '19. C&C Posters '19. DIS Papers '18, '19. NordiCHI Papers '18.