

JEN LIU

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Research Interests: wearable technology, citizen science, design research, critical design

EDUCATION:

- 2015 – present Carnegie Mellon University, Pittsburgh, PA
Emerging Media Masters Candidate, 4.0
(expected graduation: May 2017)
- 2008 – 2012 Maryland Institute College of Art, Baltimore, MD
BFA Fiber, summa cum laude 3.86

WORK EXPERIENCE:

- Summer 2016 **Design and Engineer Intern**
Welspun USA, Pittsburgh, PA & New York, NY
- Conduct user research for smart textile applications for global textile goods producer
 - Prototype and develop proof of concept for smart textile product for home environment that will be available for market
- 2015 – present **Research Assistant, Learning Media Design Center**
Carnegie Mellon University, Pittsburgh, PA
- Research work under NSF grant #1623969, “Seeing to Learn, Learning to See”
 - Designed backend content management system for macroinvertebrates.org
 - Create design research methods for analyzing information design and learning science of field guides
- 2013 – 2015 **DIY Manager**
Maryland Science Center, Baltimore, MD
- Create STEM and design based educational programming and workshops for maker space in a museum setting
 - Teach and lead workshops for K-12 students, college students and adult learners
- 2012 – 2014 **Workshop Leader/Maker-In-Residence**
FutureMakers, Baltimore, MD/ DC area
- Lead STEM, design and art based workshops and classes for K-12 students
 - Create curriculum and syllabus for workshops

TEACHING EXPERIENCE:

- 2015 - present **Co-Instructor, Carnegie Mellon University**
- Soft Fabrication Skills Micro-Course*
Co-Instructed with Prof. Susan Finger, IDEaTe
Spring 2016, Fall 2016, Spring 2017 (expected)
- Developed curriculum, syllabus, demos and discussions for 1-unit course on textile skills for students across campus.
 - Lead discussions and demos on textile techniques
- 2015 **Graduate Student Instructor, Carnegie Mellon University**
- Hacking the Music World*
Prof. Jesse Stiles, School of Music
Fall 2015
- Updated course material and assisted students on coding and videography work
- 2014 **Guest Lecturer**
- Maryland Institute College of Art, Baltimore, MD
Smart Textiles, Spring 2014
Prof. Olivia Robinson
- Presented wearable technology projects and introduced materials and methods in working with interaction design and textile techniques

PROFESSIONAL ACTIVITIES:

- 2016 **Selection Committee**
Teaching Innovation Award
Carnegie Mellon University, Pittsburgh, PA
- 2016 **Invited Presenter**
Soft Fabrication: Skills-based Micro-Course
Teaching and Learning Summit, Carnegie Mellon University, Pittsburgh, PA
- 2015 **Invited Participant**
a2ru Emerging Creatives Student Summit
University of Michigan, Ann Arbor, MI
- 2014 **Workshop Leader**
Soft Circuits Public Workshop
Ripple Gallery, Rockville, MD
- 2014 **Panelist**
Textile Futures
Studio Art Quilt Association, Washington, D.C.
- 2014 **Workshop Leader**
Paper Circuits workshop for Art Educators
Maryland Art Education Association, Ellicott City, MD

SELECTED PRESS AND PUBLICATIONS:

(Submitted) Liu. J. (November, 2016). *Data HarVest: Physical and Digital Data Collection for Citizen Science*. ISEA'17 Academic poster submission. Manizales, Colombia.

(Forthcoming) Liu. J. (October, 2016). *Field Computing: Wearable Devices for Citizen Science Applications*. TEI'17 Works in Progress. Yokohama, Japan.

Liu. J. *Butt Blinkers*. (2014). Featured project in Make: Wearable Electronics. Sebastopol: Maker Media.

HONORS AND AWARDS:

- 2015 **Graduate studies scholarship**, Carnegie Mellon University
- 2013 **30 Creative Minds Under 30**, Maryland Art Place, Baltimore, MD
- 2012 **Fiber Department Recognition Award**, MICA
- 2011 **Nominee: Windgate Fellowship**
Nancy Lee Rhodes Robert '39 Scholarship, MICA
- 2010 **Achievement Award**, MICA
- 2008 **Presidential Scholar in the Arts**
The Scholastic Arts and Writing Awards
Gold Key Recognition, Photography Portfolio
National Silver Level, Photography Portfolio
Maryland Distinguished Scholar in the Arts

SELECTED RESIDENCIES:

- 2016 Artist-in-Residence, Iowa Lakeside Laboratory, Milford, IA
- 2013 Interactive Telecommunications Program Fellow, New York University, NY

SELECTED ART EXHIBITIONS:

- 2016 *It Worked Just a Second Ago*, Unblurred, Pittsburgh, PA
Sixth Annual Pittsburgh Zine Fair, Union Project, Pittsburgh, PA

- 2015 *Get Small 3*, Turpentine Gallery, Oakland, CA
Open Space 5th Annual Prints and Multiples Fair, Baltimore, MD
- 2013 *Ripple*, VisArts Gallery, Rockville, MD
Open Space 4th Annual Prints and Multiples Fair, Baltimore, MD
- 2012 *Digital Legacies of the Avant-Garde*, The New School, NYC, NY
Small Wonders, Circle Gallery, Annapolis, MD
Cloth of Action, Middendorf Gallery, Baltimore, MD
Power Suits, School 33, Baltimore, MD
Commencement Exhibition, MICA, Baltimore, MD
National Robotfest & DIY Expo, U.S. Science and Engineering Festival, Washington, D.C.
Garment Workers, Middendorf Gallery, Baltimore, MD
Hands On, Piano Gallery, Baltimore, MD
- 2011 *Juried Undergrad Show*, Decker Gallery, Baltimore, MD
Not Your Father's Trousers, Middendorf Gallery, Baltimore, MD
- 2010 *Sign Language*, Whole Gallery, Baltimore, MD
Group Production, Basement Gallery, MICA, Baltimore, MD
- 2009 *Juried Undergrad Show*, Decker Gallery, MICA, Baltimore, MD
- 2008 *Presidential Scholars in the Arts: Works in the Visual and Literary Arts*, National Portrait Gallery, Washington, DC

TECHNICAL PROFICIENCIES:

- Proficient in programming for prototyping (*Processing, Python*)
- 3D modeling for design and fabrication (*Sketchup, Rhino, Solidworks, AutoCAD*)
- Hardware and electronics prototyping (*Arduino, Photon*)
- Prototyping and programming for wearable technology (*LilyPad Arduino, Gemma*)

- Extensive experience and knowledge with fabrication processes including *woodworking, metalworking, casting/molding, physical computing, digital fabrication*
- Extensive experience in a wide range of textile techniques including *knitting, sewing, weaving, crochet, soft circuitry, garment construction, printing, dyeing*
- Design research and user experience methodologies (user testing, storyboarding, paper/digital prototyping, user evaluations)
- Extensive experience with photo and video editing and visual design (*Adobe Photoshop, Adobe Premiere, Adobe Illustrator*)
- Experience teaching students in K-12, college and adult learner in formal and informal environments
- Proficient in web design (*HTML, CSS, jQuery*)

REFERENCES:

Golan Levin
Associate Professor,
School of Art
Carnegie Mellon University
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Daragh Byrne
Intel Special Faculty,
IDeATe Program
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