

Anamary Leal, PhD

User Experience Researcher (UXR) & Maker/Crafter
San Francisco Bay Area

PROFILE

Technology is meant to support society, especially underserved communities. My 12+ years experience, PhD in UX, & training in craftsmanship lets me research interactive experiences for any challenging domain. I am an expert in **virtual reality/VR/XR, crowdsourcing, maker culture & mixed (qualitative/quantitative) methods.**

Accomplishments include:

- Awarded over **\$100K for grants and fellowships**
- Over **20 peer-reviewed publications, position papers**
- **Multi-award-winning** master-level costume designer/builder

PROFESSIONAL EXPERIENCE

Principal Investigator & Assistant Professor, *Fall 2017-2021*
Sonoma State University (SSU)

Select Research

Design of Technology to Support Craft Knowledge *2017 - Current*

- Designed mixed-methods generative research to understand how crafters seek craft knowledge online
- Established a team of multidisciplinary, diverse students to conduct, analyze and disseminate studies in professional venues
- Delivered design recommendations that resolve the contradiction between learning tangible knowledge through digital mediums
- Recognized as Top 10 research projects in SSU 2019, accepted in CHI 2021 Workshop, pending conference submission

Negotiating Fabric Descriptors Using Technology *2014 to 2018*

- Established/implemented innovative research exploring how designers describe fabrics
- Addressed the problem of designers searching for craft supplies online, despite users using ambiguous and situated terms
- Collaborated with fashion stakeholders to deliver design guidelines
- Designed, developed, and evaluated fabric search systems using web analytics, performance data, crowdsourcing technology



Portfolio site

[\[anamary.net\]](http://anamary.net)



LinkedIn

[\[Profile Link\]](#)



Email

[\[aaleal08+resume@gmail.com\]](mailto:aaleal08+resume@gmail.com)

EDUCATION & HONORS

**Ph.D in Computer Science,
Human-Computer Interaction**

Virginia Tech, 2017

NSF Graduate Fellowship: \$90K stipend
for 3 years

Bachelor's in Computer Science

University of Central Florida, 2009

SKILLS

- **UX Research:** exploratory research, contextual inquiry, evaluative research, multi-method studies, surveys, in-depth interviews, questionnaires, iterative research, moderated studies, sketching, personas, storyboarding, observational research, scenarios, rapid prototyping, thematic analysis, open-coding, topic modeling, focus groups, usability testing, statistical modeling, affinity mapping, heuristic evaluation, data analytics, ethnography, storyboarding
- **Maker/physical computing skills:** soldering, microcontrollers, sensors, hand/machine sewing, drafting patterns, costume/garment construction, costume crafts, laser cutting, 3D modeling/printing, CNC machinery, power tools, vinyl cutting

PROFESSIONAL EXPERIENCE

Teaching Responsibilities

- Educated 120+ students with no prior experience to master design thinking, agile, UXR/UX design, complex machinery/tools
- Innovated software projects course by embedding industry UXR & design techniques, resulting in industry-recognized apps
 - Project videos: [\[Spring 2021\]](#) and [\[Fall 2020\]](#)
- Led multiple multidisciplinary cross-functional student teams & stakeholders to make products to non-profit organizations [\[including a vaccine clinic\]](#), in one month

User Experience Engineer, Intel Corporation May 2013-Aug 2013

- Launched exploratory research, designed and prototyped a "hacker" or do-it-yourself 9-camera array using commodity hardware
- Led a successful multi-disciplinary 4-person, initially dysfunctional team to launching prototype demos, camera viewers and presentations to internal and external audiences
- Awarded top rating for performance and leadership rating, given selectively for multi-disciplinary leadership

Costume Builder/Designer, Virginia Tech & various 2014-current

- Built 100+ costume pieces/accessories in 4+ major productions
- Analyzed, designed, prototyped and built interactive multimedia costumes with electronics, sewing, drafting
- Awarded 1st place, Best Recreation in Intl/regional competitions

Instructor, Computer Science (CS) Dept, Virginia Tech, 2015-6

Research Assistant, U. of Southern California 2011

University of Southern California

Usability Engineer, MITRE Corporation May 2009- July 2009

LEADERSHIP

Co-organizer, Girls Tinker Academy 2018

- Launched a full Maker/STEAM mini-summer camp, where I co-hosted/taught 24 middle school girls
- Orchestrated between multiple teams (makerspace, mentors, assistants, stakeholders from Career Technical Education Foundation Sonoma County)
- Recognized by [\[Press Democrat\]](#), [\[SSU President Sakaki\]](#)

SKILLS CONTINUED

- **Product Management:** Agile/SCRUM, product leadership, multiple-project management, teaching, mentoring
- **Design:** lo/mid/hi-fidelity prototyping, design thinking, teaching
- **Programming languages:** C#, Python, Arduino, R, among others
- **Software:** Adobe Creative Cloud (Illustrator, Photoshop, InDesign, XD), Qualtrics, Microsoft Office, Google Suite, Amazon Turk
- **Spoken languages:** Fluent in Spanish, English, familiar with Japanese

GRANTS AND AWARDS

California State University/Adobe

Digital Literacy Grant: \$3K to support design in makerspace class, 2020

SSU Grace Hopper Travel Award: \$10K for leading women students to attend Grace Hopper Women in Computing Celebration Conference, 2020

NSF Graduate Fellowship: \$90K stipend for 3 years, 2010

SELECT PUBLICATIONS

Leal, A. "Negotiating Ambiguity in Describing Fabrics Through Technology." Tangible and Embodied Interaction Conference [\[DOI\]](#) [\[Paper\]](#) [\[Full Thesis\]](#)

Leal, A., et al. "3d sketching using interactive fabric for tangible and bimanual input." In *Proceedings of Graphics Interface 2011* [\[Paper\]](#)