

CELINE TA

ENGINEERING + INDUSTRIAL DESIGN

celineta.design@gmail.com | celineta.com | 818.451.5284

EDUCATION

FRANKLIN W. OLIN COLLEGE OF ENGINEERING, Needham, MA

B.S. Engineering, with a concentration in Product Design & Development, Class of 2017

EXPERIENCE

DESIGN THAT MATTERS, Design Capstone / Industrial Design Fellow

Sep 2016- present

- > Define product requirements for novel newborn warmer through observations in Vietnamese and US hospitals and interviews with health professionals globally, working on teams of 3 to 9 people
- > Evaluate potential markets in southeast Asia and sub-Saharan Africa, and analyze social return on investment of adding warmer to award-winning Firefly phototherapy device
- > Design and build a "works-like" and "looks-like" alpha prototype for "hard to use wrong" interface
- > Document product need and progress in writing, photos for future teams and sponsors

ELEMENTAL MACHINES, Research & Development Intern

Jun 2016- Aug 2016

- > Design and test user journeys, physical and web interfaces for lab-oriented Internet of Things product
- > Experiment with RFID technologies (sensor characterization) with wireless data transfer (Arduino)
- > Manufacture ~10 packaged devices in-house, with emphasis on circuit prototypes and form factor
- > Prototype and deploy 3 iterations of devices at client lab over the course of 2 months, on team of two

DAKTARI DIAGNOSTICS, Project Manager/ Student Consultant

Aug 2015- Dec 2015

- > Manage a four-person student engineering and business team developing sickle cell disease diagnostic for low-resource contexts in the U.S. and the "malaria belt" in sub-Saharan Africa
- > Consolidate three-stage diagnostic process into an all-in-one Raspberry Pi-based device in 3 months

THE MEME DESIGN, Design Research Intern

Jun 2015- Aug 2015

- > Pilot agile design exploration of Internet of Things product opportunities in the home, developing 5 "works-like" physical and app mockups (Illustrator, PhoneGap), conducting ~25 interviews for feedback
- > Canvass for feedback on social fashion app developed in MEME Labs, ~25 interviews over 1 week
- > Research and draft presentation materials for client IoT vision, user stories, and competitive landscape

SHARKNINJA, Quality Engineering (New Product Development) Intern

May 2014- Aug 2014

- > Lead cross-functional investigation proposal to better understand vacuum maneuverability needs, including ROI and cost analysis, preliminary qualifiers and survey research
- > Tear down engineering prototypes and post-mortem units for quality, evaluate out-of-box experience
- > Developed real-world performance tests, key performance indices and risk management documents
- > Moderated both usability and observational studies, leading up to 3 product launches

INTERESTS

VENTURE DESIGN AND SOCIAL ENTREPRENEURSHIP

Researching product ventures as an alternative to policy. Board member for the university entrepreneurship group. Consulted on user research, business model, and product design for 5+ social ventures on urban housing, English language learning, and more.

2D/ 3D DESIGN

Self- study of pop-ups, street art, playful communication design, and critical design

TOOLS

DIGITAL PROTOTYPING Solidworks, Adobe Creative Suite, POP/ Invision

FABRICATION Routing, casting, manual mill, brazing, layup, 3D printing, laser cutting, spray painting

PROGRAMMING Python, Arduino C, C, MATLAB, basic HTML/CSS/JS D3