# LEESHA V. MALIAKAL

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### RESEARCH INTERESTS

I use human-centered design to build innovative technology that will enhance and extend the natural ways in which humans reflect, learn, grow, and provide support for one another. My current interest is to study how technology might facilitate self-reflection and help-seeking within research communities of practice, and further explore possible learning and growth outcomes for students.

Areas: Computer Supported Cooperative Work, Social Computing, Crowdsourcing, Learning Technologies

### EDUCATION

Northwestern University Evanston, IL

PhD Student in Technology and Social Behavior (Computer Science + Communication Studies)

2016-present

Advisor: Dr. Haoqi Zhang

Northwestern University

Bachelor of Arts, Computer Science

2010-2015

### GRANTS, HONORS, & AWARDS

#### ACM Student Research Competition: Second Place Finalist

Summer-Fall 2015

Submitted an abstract (*CrowdCheer: Situational Crowdsourcing of Motivation for Runners*) to Grace Hopper ACM SRC, participated in a poster session during the Grace Hopper Conference, advanced to final rounds to give a presentation and placed second out of 117 participants from across disciplines in Computer Science.

### Northwestern Undergraduate Research Grant

Winter 2015

Academic Year Undergraduate Research Grants provide up to \$1,000 to pay for research expenses to do an independent academic or creative project in any field and is connected to an independent study or thesis seminar.

#### **PUBLICATIONS & PRESENTATIONS**

Haoqi Zhang, Matthew Easterday, Elizabeth Gerber, Daniel Rees Lewis, **Leesha Maliakal** (2017). *Agile Research Studios: Orchestrating Communities of Practice to Advance Research Training.* To appear at CSCW 2017.

**Leesha Maliakal** (2015). CrowdCheer: Situational Crowdsourcing of Motivation for Runners. Grace Hopper ACM Student Research Competition

### RESEARCH PROJECTS

Agile Research Studios Fall 2014-present

Agile Research Studios (ARS) is a new socio-technical model for creating a research community of practice that socially shares regulation of learning to apprentice undergraduate teams into research at scale. ARS methodologies, social structures, and tools help groups learn better together so more undergraduates can conduct authentic research.

CrowdCheer Fall 2014-present

Studying the ability to leverage ad-hoc crowds for the completion of real-time tasks in the physical world, specifically, crowdsourcing motivation for marathon runners from the crowd of spectators. Studying methods of motivating crowdworker participation by scaffolding requests off of existing crowdworker behavior.

inShape Fall 2014

Studied the ability to improve campus health by encouraging physical activity via coordinated collective experiences. Studied how we might collect valuable data from physical activities molded into physical crowdsourcing tasks.

#### **DIY Concert Location Information Disclosure**

Fall 2014

Studied the location disclosure patterns of garage/basement concert performers to understand patterns of implicit vs. explicit venue disclosure over social media in the context of unwanted attention from law enforcement/concert crashers.

#### Campus Health Design Charrette

Fall 2014

Designed and facilitated a design charrette where novice designers learned to first understand the existing contributors to student health problems on the Northwestern Campus, and to then brainstorm and storyboard concrete solutions.

#### Tangible Interface Design

Spring 2014

Worked on a team of five to design a tangible learning interface, Color Beads - connectable, colorful beads that can link to each other and change color to produce a gradient from the first bead to the last. The goal of the design is to provide a simple interface that allows children to understand traditionally complex concepts like color blending and color theory via simple visual and tangible experiences.

### **EXPERIENCE**

Delta Lab Evanston, IL

Post-Baccalaureate Research Fellow

Summer 2014-present

- Studying the crowdsourcing of motivation for marathon runners from spectators.
- Assisting in the design of the curriculum & processes for the Design, Technology, and Research program.
- Mentoring undergraduate researchers by scaffolding design, technology, and research skills.
- Studying real time, physical crowdsourcing and social computing systems.

Brave Initiatives Evanston, IL

Coding Instructor

Summer 2015-present

- Developing a week-long curriculum for Brave Camp that empowers high school girls.
- Teaching high school girls basic web development skills and walking them through building their first website.

#### AT&T: TDP Emerging Technologies

Hoffman Estates, IL

Software Development Intern

Summer 2014

- Redesigned UI for development documentation pages, redesigned UI of testing and automation API tools using Angular.js.
- Developed a mobile web app for a nationwide employee hackathon with a team of four, received high marks.
- Migrated testing framework (Windows to Linux) and debugged 122 Jenkins jobs to resolve the running of 5000+ test scripts.

#### Northwestern University Information Technology

Evanston, IL

Admin Lead Consultant, Technology Support Center

2010-2014

- Managed Lead Consultant team to ensure the development of resources, including the IT departmental website, internal Wiki, and knowledge base to improve content and usability for employees and end users.
- Supervised, evaluated, and mentored student consultants; strengthened teamwork skills among consultants to
  quickly resolve software issues and complete project work; organized and conducted testing of University
  systems prior to deployment.
- Reviewed applications and conducted interviews for Consultant and Lead Consultant positions.

• Fielded requests (calls, chats, and emails) from faculty, staff, and students across the University regarding technology concerns, provided hands-on support for configurations and virus remediation.

#### TECHNICAL SKILLS

C/C++, C#, Objective C, Swift, Assembly, SQL, JavaScript, HTML5, CSS3, XML, PhoneGap, jQuery/jQuery Mobile, UNIX, Jenkins, VIM

#### **ACTIVITIES**

Member of: Lean In Computer Science + Engineering, Anita Borg Institute Chicago Chapter, Systers Community, AAAI, ACM, ACM-W, Northwestern Chapters of IEEE, Women in Computing, Society of Women Engineers

## REFERENCES

- <u>Dr. Haoqi Zhanq</u>: Assistant Professor of Electrical Engineering and Computer Science (Northwestern University)
- <u>Dr. Liz Gerber</u>: Associate Professor of Design (Northwestern University)
- <u>Dr. Christopher Riesbeck</u>: Associate Professor of Electrical Engineering and Computer Science (Northwestern University)