Yasha S. Iravantchi

University of Michigan EECS
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Ann Arbor, MI 48109

https://yasha.xyz
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Research Interests

Human-Computer Interaction (HCI), Novel Sensing Methods, Ubiquitous Computing

Education

University of Michigan, Ann Arbor, MI — *Sep 2019 to Present*
Ph.D. Student, Computer Science and Engineering
Advisor: Alanson Sample

Harvard College, Cambridge, MA — *May 2014*
S.B., Engineering Sciences:
Electrical Engineering & Biomedical Engineering

Professional Experience

Design Specialist in Electrical Engineering — *Jun 2014 to Jun 2017*
Active Learning Labs, Harvard University SEAS
Cambridge, MA

Product Design and Engineering Intern — *Summers 2009-2012*
Design Catapult, Inc.
Fountain Valley, CA

Publications

7. **Yasha Iravantchi**, Mayank Goel, Chris Harrison. Digital Ventriloquism: Giving Voice to Everyday Objects. *To Appear In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20)*, 2020

6. Yang Zhang, **Yasha Iravantchi**, Haojian Jin, Swarun Kumar, and Chris Harrison. 2019. Sozu: Self-Powered Radio Tags for Building-Scale Activity Sensing. *In Proceedings of the 32nd Annual ACM Symposium on User Interface Software and Technology* (UIST '19), 2019

5. **Yasha Iravantchi**, Yang Zhang, Evi Bernitsas, Mayank Goel, Chris Harrison. Interferi: Gesture Sensing using On-Body Acoustic Interferometry. *In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, 2019 - ***Best Paper Honorable Mention Award***

4. **Yasha Iravantchi**, Mayank Goel, Chris Harrison. BeamBand: Hand Gesture Sensing with Ultrasonic Beamforming. *In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, 2019

3. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos. SwellFit: Developing a Wearable Sensor for Monitoring Peripheral Edema. *In Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS-52)*, 2019

2. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, Barbara Grosz. SwellFit: a Wearable Sensor for Patients with Congestive Heart Failure. *In Proceedings of the Workshop on Interactive Systems in Healthcare (WISH) 2016*, 2016.

Publications

1. Sunyoung Kim, **Yasha Iravantchi**, Krzysztof Z. Gajos, Barbara Grosz. Exploring Opportunities for Social Infrastructure in Congestive Heart Failure Management. *In Proceedings of the CSCW 2015 workshop on Moving Beyond e-Health and the Quantified Self*, 2015

Invited Talks

2. *"Labs in the Wild": Teaching Signal Processing Using Wearables and Jupiter Notebooks in the Cloud*. SciPy Conference 2016, Austin, TX

1. *Wearable Signal Processing Using Docker Notebook Containers on AWS. JupyterDays Boston 2016*, Cambridge, MA

Teaching Experience

Teaching Fellow:
ES 155 Biological Signal Processing (Spring 2016, Fall 2016)
ES 50 Introduction to Electrical Engineering (Spring 2013, Spring 2014)
BE 110 Physiological Systems Analysis (Fall 2013)

Course Assistant:
ES 52 The Joy of Electronics - Part I (AY 14, 15, 16)
ES 96 Engineering Problem Solving and Design Project (AY 14, 15, 16)
ES 100 Engineering Design Projects (AY 14, 15, 16)
ES 151 Applied Electromagnetism (Spring 2016)

References

Alanson Sample
Associate Professor in Electrical Engineering and Computer Science
Interactive, Sensing, and Computing Lab
University of Michigan
e: apsample@umich.edu

Todd Austin
Professor in Electrical Engineering and Computer Science
Center for Architectures Research (C-FAR)
University of Michigan
e: austin@umich.edu

Krzysztof Z. Gajos
Gordon McKay Professor of Computer Science
Intelligent Interactive Systems Group
Harvard University SEAS
e: kgajos@seas.harvard.edu

Community Service

Student Volunteer:
ACM CHI Conference on Human Factors in Computing, April 2018

Languages

Computer Languages:
C, MatLab, LaTeX, HTML, PHP, Java, JavaScript, Python

Human Languages:
English (Native), Persian (Native), Spanish (Previously Fluent)