

Yasha S. Irvantchi

2260 Hayward St, Ann Arbor, MI 48109
<https://yasha.xyz> — yiravan@umich.edu

- EDUCATION**
- University of Michigan**, Ann Arbor, MI Sep 2019 - Present
Ph.D., Computer Science and Engineering
Advisor: Alanson Sample
- Harvard College**, Cambridge, MA May 2014
S.B., Engineering Sciences:
Electrical Engineering & Biomedical Engineering
- WORK EXPERIENCE**
- Design Specialist in Electrical Engineering** Jun 2014 - Jun 2017
Active Learning Labs, Harvard University, Cambridge, MA
- Product Design and Engineering Intern** Summers 2009-2013
Design Catapult, Inc., Fountain Valley, CA
- PUBLICATIONS**
7. **Yasha Irvantchi**, Mayank Goel, Chris Harrison. Digital Ventriloquism: Giving Voice to Everyday Objects. *In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20)*, 2020
 6. Yang Zhang, **Yasha Irvantchi**, 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 Irvantchi**, 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 Irvantchi**, 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 Irvantchi**, 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 Irvantchi**, 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.
 1. Sunyoung Kim, **Yasha Irvantchi**, 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. Jupyter-Days Boston 2016, Cambridge, MA

**TEACHING
EXPERIENCE****Teaching Fellow:**

[Harvard] ES 155 Biological Signal Processing (Spring 2016, Fall 2016)
[Harvard] ES 50 Introduction to Electrical Engineering (Spring 2013, Spring 2014)
[Harvard] BE 110 Physiological Systems Analysis (Fall 2013)

Course Assistant:

[Harvard] ES 52 The Joy of Electronics - Part I (AY 14, 15, 16)
[Harvard] ES 96 Engineering Problem Solving and Design Project (AY 14, 15, 16)
[Harvard] ES 100 Engineering Design Projects (AY 14, 15, 16)
[Harvard] 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

Nikola Banovic
Assistant Professor in Electrical Engineering and Computer Science
Computational Modeling in Human-Computer Interaction Lab
University of Michigan
e: nbanovic@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****Paper Reviewer:**

CHI 2019, 2020, 2021
UIST 2019, 2020
IMWUT Feb 2020, May 2020, Aug 2020
DIS 2020

Student Volunteer

ACM CHI Conference on Human Factors in Computing, April 2018

LANGUAGES

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

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