Yasha S. Iravantchi

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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

IN SUBMISSION

Yasha Iravantchi, Alanson Sample. PrivacyMic: Utilizing Inaudible Frequencies for Privacy Preserving Daily Activity Recognition. *In Submission to the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21), 2021*

Yasha Iravantchi, Omar Al-Ejel, Raymond Pang, Yiwen Yin, Wen Si, Yang-Hsi Su, Alanson Sample. T4Train: A Framework for Rapid Prototyping of Machine Learning-Driven Interactive Applications. *In Submission to the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21), 2021*

PUBLICATIONS

7. **Yasha Iravantchi**, 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 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.*

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.* 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
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)