

# Darius Irani

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## Education

### Johns Hopkins University

M.S.E. IN COMPUTER SCIENCE

Baltimore, MD

Expected December 2020

- **Coursework:** Natural Language Processing, Chatbots & Dialog Systems, Information Retrieval, Vision as Bayesian Inference, Deep Learning

### Johns Hopkins University

B.S. IN COMPUTER SCIENCE AND B.S. IN APPLIED MATHEMATICS & STATISTICS

Baltimore, MD

December 2019

- **Coursework:** Probabilistic Graphical Models, Machine Learning, Computer Vision, Statistics, Time Series Analysis, Parallel Programming
- **Cumulative GPA:** 3.63
- **Extra Curriculars:** DSAGA (Diverse Sexuality & Gender Alliance), Community School Initiative, oSTEM (Out in STEM)
- **Honors:** Dean's List, Upsilon Pi Epsilon Member
- **Teaching Assistant:** Machine Learning (head), Algorithms, Data Structures

## Skills

**Languages:** Python, Java, C/C++, JavaScript, SQL, R,  $\text{\LaTeX}$ , HTML, PHP, MATLAB

**Tools:** PyTorch, ParlAI, OpenCV, React/Redux, GraphQL, Git, Bash, Tableau

## Work Experience

### Amazon

SOFTWARE DEVELOPMENT ENGINEERING INTERN

Seattle, WA

May 2019 - August 2019

- Worked on platform used by vendor managers to control sourcing of goods in Fulfillment Centers for Amazon Fresh and PrimeNow
- Streamlined merchant on-boarding process from 5 disconnected steps to 1 seamless step, reducing overall time from 55 days to 1
- Added user input fields to React front-end portal and created feature in Java back-end API that is invoked to synchronize these fields using AWS Step and Lambda functions. Modified GraphQL queries to fetch and display data from synchronized external storage service.
- Delivered user stories in 2 week sprints and tracked process using daily scrums within Agile framework

### Johns Hopkins University, Clinical Data Science

RESEARCH ASSISTANT

Baltimore, MD

March 2019 - Present

- Isolated error-prone signals from MIMIC-III critical care database and produced cleaned signal dataframe for publication using Python
- Developed pipeline to merge signals from matching ICU stays and remove overlap ambiguity with rules defined using clinical domain expertise

### University of Washington, eScience Institute, Data Science for Social Good

DATA SCIENCE FOR SOCIAL GOOD STUDENT FELLOW

Seattle, WA

June 2018 - August 2018

- Designed interactive mobility index for Seattle Department of Transportation to make strategic policy decisions and generated interactive visualization dashboards with GeoPandas and Tableau
- Developed geocoder module that integrated disparate datasets based on common attributes and computed normalized scores for transportation mode availability, affordability, and reliability

## Leadership

### TCO Team

PRESIDENT

Baltimore, MD

September 2017 - Present

- Organized events for students interested in entrepreneurship on campus, including a social entrepreneurship panel and Square One, a startup and innovation showcase attended by over 120 people
- Mentored student entrepreneurs through ideation, feasibility analysis, market research, and incorporation processes

## Conferences and Hackathons

### West Big Data Innovation Hub All Hands Meeting

POSTER FOR SEATTLE MOBILITY INDEX

Boise, ID

September 2018

### IDIES Machine Learning Visualization Hackathon

FIRST PLACE

Baltimore, MD

January 2019

- Developed interactive geospatial visualizations of Baltimore's 911 calls to determine biases in data over time

### HopHacks Data Science Challenge

FOURTH PLACE

Baltimore, MD

February 2018

- Utilized ResNet50 convolution network with PyTorch for unsupervised image classification