Davina ZAMANZADEH

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EDUCATION

University of California, Los Angeles

PhD (IP) - COMPUTER SCIENCE   GPA: **4.0/4.0**   SEPT 2018 - PRESENT

- Research in **eHealth and Machine Learnin**g (ML) with Dr. Majid Sarrafzadeh
- *Relevant coursework:* ML, ML Theory, Probabilistic Graphical Models, Automated Reasoning, Probabilistic Programming and Relational Learning, Web Information Management, Natural Language Processing (NLP)

University of California, Santa Barbara

BSc - COMPUTER SCIENCE   GPA: **3.93/4.0**   SEPT 2014 - JUNE 2018

- **Ranked #1** in graduating class with Distinction in Major.
- *Relevant coursework:* Artificial Intelligence/Machine Learning, Networking, Security, Computer Vision, Distributed Systems

RESEARCH

eHealth Research Lab, UCLA   SEPT 2018 - PRESENT

- Constructing a racism-aware COVID-19 surveillance system to address health inequities as part of a collaboration between UCLA School of Public Health and Charles R. Drew University of Medicine.
- Building predictive models for rapid decline in Chronic Kidney Disease (CKD) as part of a UCLA Health project to incorporate ML to aid with medical care for patients with CKD.
- Established a collaboration with Translational Genomics Group at Cedars Sinai to build a model to predict whether a Crohn's Disease patient will experience post-operative recurrence.
- Managing/Administrator of one of the GPUs that is shared amongst the lab.

Programming Languages Lab, UCSB   JAN 2017 - JUNE 2018

- Investigated effective comparison metrics for test sets/fuzzers under Dr. Ben Hardekopf.

WORK EXPERIENCE

Machine Learning Intern at **Pinterest Labs**, *Remote*   JUNE 2020 - SEPT 2020

Query Recommendations: Built a gradient boosted decision tree to improve query recommendations to improve user engagement and experience.

- 156k increase in daily searches (3.09%), and sustained lift in product usage past week 1 of the experiment. Ran A/B testing experiments to measure product impact.
- Worked on the end-to-end machine learning pipeline (collect training data, assign labels, create features, train, evaluate, and deploy), and built workflow for grid search / hyperparameter tuning.

Technologies: python, java, scala, hadoop, SQL

Software Engineer Intern at **Pinterest**, *San Francisco, CA* June 2017 - Sept 2017

- **New Annotations Pipeline:** Built and optimized core components for Annotations (a powerful textual learning signal used across Pinterest), such as: underlying dictionary of terms and their canonical forms. Collaborated with colleagues on a ML and Natural Language Processing-focused team.
- **Internationalization:** Improved Annotations quality by analyzing and sanitizing the existing dictionary. Ensured that the distribution of Japanese scripts across the dictionary matched that of the Japanese users' queries, descriptions, etc.

Technologies: python, java, scala, scalding, spark

Publications

1. Miroslav Gavrilov, Kyle Dewey, Alex Groce, **Davina Zamanzadeh**, Ben Hardekopf. *A Practical, Principled Measure of Fuzzer Appeal: A Preliminary Study.* IEEE International Conference on Software Quality, Reliability, and Security (QRS) 2020.

    Propose an automated method for comparing fuzzers using a metric called fuzzer appeal.

2. Anahita Hosseini, **Davina Zamanzadeh**, Lisa Valencia, Rima Habre, Alex Bui, Majid Sarrafzadeh: *Domain Adaptation in Children Activity Recognition.* IEEE Engineering in Medicine and Biology Conference (EMBC) 2019.

    Demonstrates effectiveness of domain adaptation in wireless health. We adapt a predictive model from a labeled adult to an unlabeled child activity recognition dataset.

3. Mohammad Kachuee, Kimmo Kärkkäinen, Orpaz Goldstein, **Davina Zamanzadeh**, Majid Sarrafzadeh: *Nutrition and Health Data for Cost-Sensitive Learning.* arXiv abs/ 1902.07102 (2019)

    Investigate the performance of cost-sensitive feature acquisition methods currently popular in literature on classification tasks for different medical complications.

Activities and Awards

2018 & 2019	**Graduate Dean's Scholar Award:** Departmental award given to highly recruited students who are deemed to enhance UCLA's competitiveness.
Oct 2017	**Grace Hopper Celebration Scholarship**: Received one of few awards from the Computer Science department at UCSB to attend GHC.
Summer 2017	**KPCB Fellow and Decision Committee:** Selected to participate in networking events with technical leaders in Silicon Valley. Served on the Decision Committee for potential 2018 Fellows.
Spring 2016 - Spring 2018	**Phi Sigma Rho Chapter Founder/Director of Design:** Established the UCSB chapter of Phi Sigma Rho, a national sorority for women in STEM, as part of the founding class. In charge of designs, and involved in planning events, writing bylaws, recruiting, and mentorship.
Fall 2014 - Spring 2018	**SB Hacks Organizer:** Planning/running a large-scale hackathon at UCSB every year: involved in logistics (venue, food, etc), design, and getting sponsors.