KAREN LI

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EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES
SEPTEMBER 2015 TO JUNE 2019

- B.S. Computer Science
- Cumulative GPA: 3.98 (Dean's Honors List)
- Honor Societies: Upsilon Pi Epsilon, Tau Beta Pi

SKILLS AND COURSEWORK

LANGUAGES C++, C, Python, JavaScript, Hack, PHP, SQL, MATLAB, HTML/CSS

SOFTWARE TOOLS MySQL, PostgreSQL, Git, Mercurial, Bootstrap, Node.js, WebGL

CS M146 Machine Learning | **CS 111** Operating Systems

CS 118 Computer Networking | **CS 130** Software Engineering

EXPERIENCE

SOFTWARE ENGINEER INTERN FOR FACEBOOK
JUNE 2017 TO SEPTEMBER 2017

- Built all infrastructure for comment ranking personalization from ground up
- Extracted features from comments and users to use as input for ML models, both in real-time and using data pipelines for aggregate features
- Combined user engagement prediction scores generated from ML models for each comment into personalization scores used for ranking comments
- Ran ranking experiments in production and then analyzed resulting metrics

JR. WEB DEVELOPER FOR FORTINET
JUNE 2016 TO SEPTEMBER 2016

- Created a new archive for Fortinet's bug reporting database to optimize time required to view entries by splitting data between two databases
- Wrote scripts to correctly insert and remove data between tables of 4M+ entries

PROJECTS

RAINBOW RUNNER (JAVASCRIPT, WEBGL, HTML/CSS)

- Vertically scrolling game where the player must dodge randomly generated cubes while navigating a Mario Kart Rainbow Road or Super Mario themed world
- Implemented all computer graphics and game logic from scratch

LOOPS TEXTBOOK TRADING (JAVASCRIPT, NODE.JS, POSTGRESQL, HTML/CSS)

- Textbook trading application that uses graph theory algorithms to find trade loops
- Implemented live search, user authentication, and APIs to interact with database
- Created home page and pop-up to allow user to add or edit a new trade relation

REINFORCEMENT LEARNING TRADING (PYTHON)

- Reinforcement learning agent that uses Bitcoin price time series to learn an optimal stock trading policy to maximize total profit for each episode
- Supervised by Dr. Fabien Scalzo of UCLA Neurovascular Imaging Research Core

CYBER SPIDER ATTACK DETECTION SYSTEM (C++)

- Implemented disk-based hash tables to search for relationships between known malicious entities and other entities to discover as-yet unknown malicious entities
- Received score of 99/100, whereas class median score was 53/100