Prathik Rao

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EDUCATION

University of Southern California, **Viterbi School of Engineering** — Los Angeles, CA
Bachelors of Science in Computer Science and Computer Engineering — Aug 2017 - May 2021
Minor in Cinematic Arts, ***GPA:*** *3.4*

Stanford University, Computer Science Department — Palo Alto, CA
Computer Science Intensive Study Certification, ***GPA:*** *3.6* — Jun 2018 - Aug 2018

EXPERIENCE

Microsoft Corporation - Azure Compute — Redmond, WA
***Incoming Software Engineering Intern* — May 2020 - Aug 2020

Intel Corporation - Artificial Intelligence Products Group — San Diego, CA
Software Engineering Intern — May 2019 - Aug 2019

- Used JIRA API and Jenkins CI to retrieve test result data from 10+ test suites and synthesized it into a useful report
- Developed a Python Flask microserver that served the report data to a React front-end web dashboard
- Used historical test data and environmental conditions to train a logistic regression model to predict test failure
- Predictions were then used by the development team to prioritize debugging request by probability of failure

USC Computer Science - Introduction to C++ Programming — Los Angeles, CA
Head Undergraduate Teaching Assistant — Aug 2018 - Jan 2020

- Proctor exams, grade assignments, filter/develop new assignments, and provide feedback on course instruction
- Manage 30+ TAs to ensure students receive the best support during the course

PROJECTS

Marijuana Relapse Survival Model, Directed Research — Aug 2019 - Dec 2019

- Prototyped a full pipeline in Jupyter Notebook from data processing to predictive analysis
- Predicted probability of relapse on any day of treatment with 60% accuracy (40% is humanity's gold standard)
- Deployed user-friendly web application to apply model on different demographics of people for research purposes

AI-Hardware Test Failure Prediction, Industry Machine Learning — May 2019 - Aug 2019

- Pre-processed data with ML principles such as one-hot-encoding, filling null values, and cross validation
- Wrote predictive model to predict failure with 60% accuracy and increased efficiency of debug ticket scheduling

Smart Rebounder, Robotic Basketball Hoop Attachment — Aug 2018 - May 2019

- Developed an attachment that tracks a shooter's position and rotates a rebounding attachment towards them
- Used OpenCV to track shooter position via webcam and an Atmega328 device to automate servo-motor motion

HomeHub, Web-Based Chore Distribution Tool — Oct 2018 - Nov 2018

- Developed a full-stack productivity application to distribute chores between housemates using JavaScript and Java
- Included functionality like user registration with Google sign-in API, SQL database management, and Java servlets

LEADERSHIP & INVOLVEMENT

USC Makers - Computer Electronics Organization — Los Angeles, CA
Project Manager — Aug 2017 - May 2019

- Lead a team of 7+ engineers to develop a basketball hoop attachment that'll impact the way basketball players train

USC Code the Change - Computer Science and Social Impact Organization — Los Angeles, CA
Backend Developer — Aug 2018 - Jan 2020

- Worked with Climate Cents Inc. to create a mobile/web software solution to centralize climate change fundraising