Kaylee Deng

Software Engineer — San Francisco, CA

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Technical Skills

Languages: Java, Python, JavaScript, C++, C, SQL, HTML, CSS

Technologies/Frameworks: React, Node.js, Express, MongoDB, GitHub, AWS, RLlib, PPO, Gym

Education

UC Irvine **2019 - 2021**

B.S. in Computer Science *GPA: 3.85/4.0*

Relevant Coursework

- Data Structure Implementation and Analysis
- Design and Analysis of Algorithms
- Introduction to Data Management
- Information Retrieval
- Operating System
- Intro to Artificial Intelligence
- Project in Artificial Intelligence
- Machine Learning and Data-Mining
- Concepts in Programming Languages I
- Project in Databases and Web Applications

Projects

Fabflix **04/2021 - 06/2021**

https://fabflix.shop *Full Stack Web Application*

- Simulated an e-commerce movie shopping web application with the implementation of **RESTful API**, HTTPS enabled, encrypted password and reCATPCHA
- Integrated the application to **Android platform** that retrieves data from the same backend environment
- Improved the application performance by 30% after applying **Master-Slave replication** and **load balancer** technique
- Enhanced user interaction by converting the data retrieval method to support full-text search and autocomplete that uses **Levenshtein distance**
- **Technologies Used:** JavaServlet, Javascript, MySQL, AWS, GCP, Android, HTML/CSS

Let's Fika **01/2021 - 06/2021**

https://letsfika.today/ *Full Stack Capstone Project*

- Designed system models on database structure and web application functionalities
- Worked on website's user flow and administrative content management using **MERN full stack** development
- Retrieved media contents from hosting platforms, **Spotify and Youtube**, by calling the APIs with **OAuth2.0**
- **Technologies Used:** React, Node.js, Express, MongoDB, HTML/CSS

Pixel Jump **10/2020 - 12/2020**

https://bikaylee.github.io/Pixel-Jump/final.html *Deep Reinforcement Learning Project*

- Simulated a jumping game using **Malmo** that train the agent to learn from a reward system that's based on its actions in a difficult environment with enormous action space in which the agent can choose the initial velocity and degree from a range of continuous data points to perform a jump simulation
- Trained the agent with the **PPO** algorithm that makes updates based on the transitions that were obtained by the current policy and is used in the agent's decision for better performance
- Calculated the 3D projectile motion data points to perform a real jump in Malmo
- **Technologies Used:** Python, RLlib, PPO, Gym

Experience

Teacher Assistant (Java) **San Francisco, CA**

CCSF CS Department *08/2018 - 05/2019*

- Assisted students in acquiring better understanding of targeted weak areas within Java fundamental concepts
- Administered academic guidance and tutoring to students during office hours
- Evaluated 200 student's assignments with feedbacks