

Lingfeng Guo

EDUCATION

University Of California San Diego La Jolla, CA 09/2015-06/2020

- Bachelor of Science/Master of Science in Computer Science Minor: Design
- Cumulative GPA: 3.88/4.0 Major GPA: 3.90/4.0

SKILLS

Languages

Proficient: Java, C++, HTML/CSS, JavaScript, Python, Unix

Intermediate: OCaml, C, C#, MATLAB, Assembly

Tools & Frameworks

Proficient: GitHub, ReactJS, Flask, Nginx, Firebase, MongoDB, Microsoft Azure, Jenkins

Intermediate: VueJS, TensorFlow, NumPy, NodeJS, jQuery, TCP/IP, Unity3D

PROFESSIONAL EXPERIENCE

Software Engineering Intern, TuSimple Technology, San Diego, CA 10/2017-03/2018

- Simulated truck movement for autonomous driving and optimized the collision detection algorithm.
- Built web interface for the movement simulators and built NoSQL database for simulation results.

Machine Learning Intern, Microsoft Research Asia, Beijing, China 06/2017-08/2017

- Worked on Mahjong AI, researched on machine learning approaches used in information-asymmetric games, optimized the parameter of the current model.
- Built a game log player to visualize how AI is making decisions in simulated games using PyQt.

Backend-Developing Intern, Malong Technology, Beijing, China 05/2015-09/2015

- Set up automatic deployment for the production environment virtual machines with Jenkins.
- Set up alert system for the production environment failures, which sends email notification to related departments when it detects a failure.

RESEARCH

MovieNet, The Chinese University of Hong Kong, Information Engineering Research Lab 09/2018

- Built and designed a tool for various movie-related labeling jobs, using ReactJS, Nginx and Flask. The tool is consisted of an authentication system, a worker labeling interface, and a backend quality checking interface for the researchers.
- Used motion energy model to pre-process raw movie data and movie info into clips and keyframes.

Helpful Amazon e-Book Reviews Identifier, Course Paper CSE 158 10/2017

- Build a recommender system predicting helpful new reviews for the users using Amazon dataset.
- Analyzed features like average rating bias have a strong connection to the accuracy of the result.
- Used TFIDF to find out the relation of each word in the text to the document when designing for the features, reached a conclusion that the length of the review text is a major influencer to the helpfulness result.

PROJECT

Peterbook, A Multiplatform Secured Social Network 06/2018

- As the team leader, responsible for finding user needs, managing progress, holding weekly meeting with team members.
- Set up GitHub hook and Jenkins as a conveyor belt to automatic test and deploy the changes made.
- Implemented data encryption for all data in the private live chatting sessions.

Toro Arena, 3D Shooting Game 02/2018

- Using OpenGL, implemented keyboard control, and collision detection for game functionality.
- Implemented L-system plants, particle effects, toon shading, and depth of field to stylize the graphics.

Queue, Automated Task Manager 01/2017

- An Android app focusing on helping UCSD students to manage the daily routine.
- Implemented a web crawler to capture all homework information on the course websites, so the app automatically loads homework for the user after one inputs courses in-progress.
- Implemented task sharing among groups of people and notification to groups, which helps to manage the progress of team projects.
- Using Firebase, designed and constructed data storage and implemented user authentication.