Yichen Hu

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Education

2015 – Present
Bachelor of Electrical and Computer Engineering,
Shanghai Jiao Tong University, UM-SJTU Joint Institute, 3.20/4.00.

Core Courses: Computer Organization, Data Structure and Algorithm, Game Design and Programming, Computer Network, Artificial Intelligence, Robotics

Experience

Dec 2016 – May 2017
Software Development Intern.
YITU Technology, Shanghai

- Developed a high performance testing automation framework for HTTP APIs, which became the core QA component in company's full DevOps pipeline

- Created majority of the C++ libraries in the framework that allow users to test one single case or a full test suite and generate testing report with great readability

- Conducted unit testing and integration testing in the development of the framework and improved the performance by utilizing asynchronous programming

- Gained rich experiences in orgainizing large Git projects while merging conflicts and fully delivered each milestone according the planed sprint timeline

Fab 2017 – May 2017
Research Assistant, *Reinforcement Learning in Gaming AI based on Hybrid Action Space*.
Apex Data and Knowledge Management Lab, Shanghai Jiao Tong University

- Integrated DQN and DDPG algorithms to combine both discrete and continuous feature spaces when applying deep reinforcement learning to train game AI

- Designed and tuned the reward function to improve the training speed for multiagent exploration and cooperation and improved the stability of the system

- Applied the game AI towards a 2v2 game and gained 100% wins against human players

Jul 2017 – May 2018
Team Member, *Ocean Environment Simulator*.
Game Design and Programming Course Project, Shanghai Jiao Tong University

- Built a visualized and parameter adjstable wave generation system with buoyancy simulation
- Implemented a realistic boat in Unity with C# and migrated the project to VR platform

Oct 2015 – Jun 2016
Team Member, *The LemonDB - a Relational Storage System*.
Operating Systems Course Project, Shanghai Jiao Tong University

- Implemented multi-threading database that supports various relational queries
- Modified the kernel scheduling system to optimize the performance with multi-core adoption

Activities

Jun 2016 – Jul 2017
Student Government President.
Shanghai Jiao Tong University, UM-SJTU Joint Institute

- Organized more than 50 student events; led various meetings among students and faculties; edited a new version of student handbook

- Served as a representative of the institute to participate in the process of campus student democracy building and strengthening

Sept 2017 – Dec 2017
Teaching Assistant.
Discrete Mathematics, Prof. Zachiri McKenzie

- Mentored students with helding office hours and review courses
- Assisted professor by marking assignments and preparing exercises