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Ho-Lun (Allen) Wu

SUMMARY

7+ years' experience in software development and 10+ projects in C/C++, Python, JS, SQL and Verilog etc.

HIGHLIGHTED COURSES

System/Network Administration, Operating System Design and Implementation, Hardware-Software Co-design and Implementation, Network Programming, Technology Entrepreneurship

EDUCATION

University of California San Diego   Sep 2018 — Jun 2020 (expected)
Master of Science, Computer Science and Engineering (Program of Computer Science)
National Chiao Tung University   Sep 2014 — Feb 2018
Bachelor of Science, Computer Science (Program of Computer and Electrical Engineering)

PROFESSIONAL EXPERIENCE

Industrial Technology Research Institute | Hsinchu, Taiwan
Part-time Software Engineer   Jun 2015 — May 2018
- Developed machine learning methods for extraction of keywords and trends from mandarin data source
- Developed crawler and web platform for E-Commerce and Social Network Big Data collection

Hacker College | Taiwan
Teaching Assistant and Staff   Feb 2017 — Feb 2018
- Prepared course materials and communicated with lecturers and students
- Helped students clarify the concepts in courses in relative to security and system administration

Computer Science Computer Center, National Chiao Tung University | Hsinchu, Taiwan
Teaching Assistant and Staff   Sep 2015 — Sep 2017
- Developed web platform and maintained workstation system for Computer Science Department
- Assisted students and department employees in dealing with technological issues

Introduction to Computers and Programming / Object-Oriented Programming | Hsinchu, Taiwan
Teaching Assistant   Sep 2015 — Jun 2017
- Helped students dispel their confusion and difficulties in the programming courses
- Guided students to complete their homework and answered questions about their exams

SELECTED PROJECTS

NCTU Online Judge System (https://oj.nctu.me)   2015 — present
- Founder of the team of NCTU Online Judge System devoted to judging submissions automatically
- Used by more than 8 professors from a couple of universities delivered homework through this system
- Web: developed backend with asynchronous web framework (Python) and SPA frontend with ReactJS
- Judge: collected all waiting submissions in Judge Center and dispatched to multiple Judge Clients

Parallel Programming Project – Tree Parallelization   Sep 2017 — Jan 2018
- Parallelization of expectimax searching based temporal difference learning using CUDA programming
- Achieved more than 62 times speed up in 3-layer searching with two Nvidia GTX 1080

Academic Project - Malware Detection in Machine Learning   Sep 2016 — Jan 2018
Advisor: Prof. Shiuh-Pyng, Shieh, Computer Science Dept. NCTU
- Extracted features by dynamic and static analysis, and classified via machine learning and neural network

Hardware-Software Co-design and Implementation Project – Motion Estimation   Feb 2017 — Jun 2017
- Programmed Verilog and C on FPGA to compute motion vector between two consecutive image frames
- Took less than 13 ms to finish each computation on 720 * 480 images frames

ACHIEVEMENTS

Mei-Chu Hackathon   Oct 2017
- Achieved 1st Place over 25 teams, and invited to cooperate on projects by Logitech

OpenStack Hackathon   Mar 2016
- Achieved top 6 over 35 teams (200 participants) from industry and students

ACM-ICPC Asia Jakarta Regional Contest   Nov 2015
- Achieved Rank 9th over 73 teams from several universities in Asia

Taiwan Olympiad in Informatics (TOI) Camp   2014
- Attended training camp for top 30 senior high school students, devoted to competitive problem solving