

EDUCATION

University of Massachusetts Amherst

Amherst MA

M.S. in Information & Computer Science

Jan. 2019 – Dec. 2020

- Coursework: Systems for Data Science, Distributed Systems, Advanced Algorithms, Ubiquitous Computing, Artificial Intelligence, Machine Learning, Neural Networks, Computer Vision

Nation Taiwan University

Taipei, Taiwan

B.S. in Computer Science and Information Engineering (minor in Economics)

Sep. 2009 – May 2014

- Coursework: Computer Architecture, Computer Networks, Design Patterns, Database, Compiler, Image Processing

EXPERIENCE

National Taiwan University

Taipei, Taiwan

Research Assistant – Software Development

Mar. 2018 – Dec. 2018

- Upgraded Next-Generation Sequencing (NGS) system from legacy desktop program into web-based service resulting in 150% increase in system utilization and 35% reduction on device cost.
- Designed and implemented user interfaces of NGS system as a single page application (SPA) using JavaScript ES6, Vue.js, and Element UI library. Managed third-party modules and open-source libraries with npm and webpack.
- Enriched system functionalities with 2 new features by integrating biomedical literature search engine and integrative genomics viewer (igv.js).

QSAN Technology

Taipei, Taiwan

Product Manager

Sep. 2016 – Jul. 2017

- Led development of 1 new application and 5 new functionalities for Network-Attached Storage (NAS) systems in collaboration with designers and engineers.
- Revamped UI, UX, and workflow of NAS applications resulting in 4 major updates with 80% positive feedback from users.
- Improved development process by practicing Agile principles and standardizing product requirements documents.

QSAN Technology

Taipei, Taiwan

Software Engineer

Jul. 2015 – Aug. 2016

- Empowered Unix-based NAS systems with the ability to interpret Windows permissions by patching Samba package using C and using GNU toolchain to compile it to designated x86 and x64 platforms.
- Full stack development of 6 applications for NAS systems by building RESTful APIs in PHP and implementing user interfaces with JavaScript and ExtJS.
- Created customized functions for NAS applications by building PHP extensions using C.
- Integrated Kodi media server package enabling users to play multimedia contents from NAS to TV via HDMI port.

PROJECTS

Prognomic (HopHacks 2020)

Sep. 2020

- Implemented RWD user interface for AI-assisted pre-diagnostic web service using JavaScript, Vue.js, and Element UI library.

Mynifold (Personal Project)

Jul. 2020 – Aug. 2020

- Developed a Google Chrome extension that manages and controls YouTube media players across different tabs and browser windows utilizing JavaScript and Chrome APIs.

Pygme.com (Distributed Systems)

Apr. 2020 – May 2020

- Implemented micro-service architecture to create an online multi-tier book selling service using Python with Flask. Boosted overall data query speed by 31.5% by implementing LRU caching scheme.

ML Course Competition (Machine Learning)

Apr. 2019

- Ranked 10th out of 137 in predicting sound pressure level with airfoil sensor data by building a regression model in Python.

Posture Recognition App (Ubiquitous Computing)

Mar. 2019 – Apr. 2019

- Achieved 92% accuracy on recognizing 7 different body motions by building an Android app that uses mobile phone sensors to collect body movement signals, which are then fed into ML models written in Python for analysis.

SKILLS

- **Programming Languages:** JavaScript, Java, Python, HTML/CSS, PHP, C, SQL
- **Frameworks/Libraries:** VueJS, ExtJS, Flask, Django, Apache Spark, Laravel, Element UI, Samba, PyTorch, scikit-learn, pandas
- **Tools/Platforms:** Git/SVN, npm, Docker, Amazon AWS, Android Studio, Kaggle