Tong-Ing Wu

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Education

The University of Melbourne, Melbourne, Australia

Jul. 2018 - Jul. 2020

- Master of Information Technology, WAM: 77.67/100
- Distinguished Coursework: Programming and Software Development (H1), Internet Technologies (H1), AI Planning for Autonomy (H1), Mobile Computing Systems Programming (H1), Research Project (H1)
- Research Project: "Stream Benchmarking Distributed Processing Systems"; Technologies involved: Java, Python, Linux, Apache Storm,
 Apache Zookeeper, Dragon, Nectar Cloud, Building Computer Clusters.

National Tsing Hua University (NTHU), Hsinchu, Taiwan

Sep. 2016 - Jun. 2017

- Continuing Education Program, Department of Computer Science, GPA: 4.15/4.3
- Coursework: Data Structures (A+), Operating Systems (A+), Design and Analysis of Algorithms (A), Computer Architecture (A)

National Chiao Tung University (NCTU), Taipei, Taiwan

Sep. 2009 - Jun. 2013

· Bachelor of Science, Applied Chemistry

Skills and Language Proficiency

Programming Language: Java, Python, C/C++, JavaScript, HTML5/CSS, MySQL, MIPS, Haskell, Prolog.

Other development skills: Android, Web Development (MERN Stack), Apache Storm, Unix/Linux, Git, Agile Development.

Languages: English (Fluent), Mandarin (Native), Taiwanese (Fluent), Japanese (Basic).

Projects

Task manager in JavaScript

• Implemented a single page application which can help people manage tasks.

Oct. 2020

Utilized MongoDB, Express.js, React.js, Node.js to provide RESTful API.

Motion Sensing Game in Android and Java

Oct. 2019

Implemented a motion sensing game with multiple sensors in mobile phones.

Designed the user interface and connected this app to a Firebase.

Pacman Game AI in Python Implemented an AI agent that can

Oct. 2019

Implemented an AI agent that can play Pacman Game against other teams. (Ranked top 15%)

Twitter Authorship Attribution in Python

Oct. 2019

Implemented a system that can identify the likely authorship of a given tweet, given a collection of tweets whose authorship is known.

Automatic Fact Verification System in Python

May 2019

Build an information retrieval system (search engine) to retrieve possible evidence using PyLucene.

Trained a deep learning model to verify claims using Wikipedia corpus. (Ranked top 20%)

P2P File Sharing System in Java

May 2019

• Build a TCP/UDP based distributed system which allowed file sharing and synchronization.

• Utilized cryptography API (Bouncy Castle) to implement a secure way to control peers remotely.

Spelling Corrector in Python

Sep. 2018

Implemented a word frequency model and used Levenshtein Distance to predict misspelled words. (Precision: 85%, Recall: 83%)

Indexing Algorithm Design for processor cache in C

Dec. 2016

• Implemented least recently used replacement policy (LRU)

Designed a cache indexing scheme to minimize cache conflict miss.

Bicycle-sharing System in C++

Dec. 2016

Implemented a rental bike system which can manage bikes, such as adding, renting, transferring, returning and discarding bikes.

Work Experience

Software Engineer, Melbourne, Victoria, Australia

Dec. 2019 – Mar. 2020

Scram Software

- Maintained and developed unit tests and functional tests in Python to validate our software, thereby increasing the reliability.
- Wrote scripts to extend original tests and conducted experiments to solve engineering problems.

Engineering Project Manager, Taipei, Taiwan

Sep. 2015 - Mar. 2016

Career Technology (MFG.) Co., Ltd

- Managed project progress, shipping schedule, and related issue until product goes mass production.
- Resolved customer complaints by working closely with engineering team on finding root cause of failure.