Pu-Chin Chen

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Education

University of California, Los Angeles *Sept. 2016-June 2018(expected)*
M.S. in Data Science Engineering (distance education in my 1ˢᵗ year)

University of California, Berkeley *July 2013-Aug. 2013*
Summer Program *GPA: 3.7/4.0*

National Taiwan University (NTU) *Sept. 2011-June 2015*
B.S. in Computer Science & Information Engineering (CSIE) *Last 60 GPA: 3.46/4.0*

Project Experience

Movie Database System with Web Interface, *Database Systems*, UCLA *Sept. 2016-Oct. 2016*
- Launched a movie database system using MySQL with PHP and Apache2 server handling **100,000+** data.
- Unified a variety of querying, browsing and data adding functionality as an easy-to-use Web Service.

Fleat: Manipulating Drones by Hand Gestures, *Treehacks Hackathon*, Stanford *Feb. 20th-22nd, 2015*
- Created a body-controlled drone system by Java and Kinect, attracting **2** companies for potential cooperation.
- Achieved **90%+** accuracy to recognise **8** gestures in real-time using K-nearest neighbour algorithm.
- Proposed speed-detection algorithms reducing **10-25%** time delay due to inertia forces.

User Defined Gestures for Flying Objects, *Bachelor Thesis*, NTU *June 2014-Oct. 2014*
- Summarised a set of most intuitive in-air gestures reflecting user behaviours such as ease of recognition, consistency, reversibility, and versatility, making it a good candidate for deployment in drone systems.
- Presented a taxonomy useful for analysing and characterising gestures in drone development.

Level Learning: Classify Tutorials by Difficulty, *Web Retrieval and Mining*, NTU *Mar. 2014-June 2014*
- Extracted text features using TF-IDF concept from online learning tutorials crawled by Python.
- Ranked **10** levels of documents difficulty for each query using semi-supervised learning.

Handwriting Recognition System for Chinese Characters, *Machine Learning*, NTU *Nov. 2013-Jan. 2014*
- Improved **10-15%** accuracy by image pre-processing(e.g. trim redundant margin, normalise font size).
- Experimented several models(e.g. SVM, linear regression) and got **82.1%** accuracy using random forest.

Role-Playing Game, *Object-Oriented Programming*, NTU *Mar. 2013-June 2013*
- Developed core game features including dialog system, sound effects, moving animation, bag for holding accessories, map switching and keyboard control system using Java Swing GUI.
- Designed a map editor for utilising image elements and generating multiple relational maps.

Work & Leadership Experience

Mandatory Military Service, *Artillery Soldier*, Taiwan (R.O.C) Army *Aug. 2015-Aug. 2016*
- Served as a qualified 20 mm cannon operator. Proficient in PSTAR radar and DMS missile system mounting.

Vice President, *HackNTU* *Mar. 2015-Aug. 2015*
- Led an organisation with **9** departments of **68** members and **80** volunteers to host a **3-day** hackathon for more than **800** nationwide students and industry professionals.
- Achieved sponsorship for more than **NT\$3,000,000** through building collaborative partnership with **10** multi-national enterprises such as Foxconn, Taipei City Government, Tutor ABC, Plug&Play, CyberLink.

Teaching Assistant, *Data Structure and Algorithm*, NTU-CSIE *Mar. 2015-June 2015*
- Initiated and instructed Linux and Git foundation workshops first time in this course for a **200+** enrolled students class, which helped improve learning efficiency significantly from feed backs of most students.

Back-End Engineer, *Fountain Inc.*, Taipei, Taiwan *Oct. 2014-Feb. 2015*
- Designed schema and constructed database for our e-commerce platform by MongoDB and Java.
- Established the network between Android client and Java server by socket programming.

Skills

Languages: Native in Mandarin; Fluent in English
Proficient in: Java, C/C++, SQL, PHP, JavaScript, NodeJS, HTML, Git
Familiar with: Python, MongoDB, ReactJS, UNIX shell scripting, LaTeX