# **PU-CHIN CHEN**

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#### **EDUCATION**

### University of California, Los Angeles (UCLA)

Distance Education in the 1st year

M.S. in Data Science Engineering

Sept. 2016-June 2018

- Coursework: Database Systems; Anticipated Courses: Big Data Analytics, Big Data Systems, Adaptation and Learning, Advanced Modeling and Inference, Learning and Reasoning with Bayesian Networks
- GRE: Q170/170 (**Top 3%**)

#### National Taiwan University (NTU)

Taipei, Taiwan

B.S. in Computer Science

Sept. 2011-June 2015

- Coursework: Data Structures and Algorithms, Operating System, Computer Network, Object-Oriented Software Design, Machine Learning, Web Retrieval and Mining, Linear Algebra, Probability, Advanced Statistics
- Taiwan National College Entrance Exam: Math: 100/100 (Top 1%); Physics: 99/100 (Top 0.1%)
- Bachelor Thesis Project: Manipulating Drones by Gestures Recognition
  - Represented NTU in 2015 Stanford Treehacks Hackathon; Created a body-controlled drone system using Java on Processing platform to control Kinect and AR.Drone within 36 hours, attracting 2 companies for potential cooperation.
  - Achieved 90%+ accuracy to recognise 8 gestures in real-time using K-nearest neighbour algorithm; Proposed speeddetection algorithms reducing 10-25% time delay due to inertia forces.

#### PROFESSIONAL EXPERIENCE

Teaching Assistant Taipei, Taiwan

Data Structure and Algorithm

Mar. 2015-June 2015

• Initiated and instructed Linux and Git workshops first time in this course for a 200+ enrolled students class, which helped improve learning efficiency from feedbacks of students.

Back-End Engineer
Taipei, Taiwan
Fountain Inc.
Oct. 2014-Feb. 2015

• Designed schema and constructed database for our e-commerce platform using MongoDB and Java.

• Established the network between Android client and Java server by socket programming.

#### **PROJECT EXPERIENCE**

# Movie Database System with Web Interface, Database Systems

UCLA

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

#### Level Learning: Classify Tutorials by Difficulty, Web Retrieval and Mining

NTU

- Extracted text features using TF-IDF concept from online learning tutorials crawled by Python.
   Mar. 2014-June 2014
- Ranked 10 levels of documents difficulty for each query using semi-supervised learning.

#### Handwriting Recognition System for Chinese Characters, Machine Learning

NTU

- Improved 10-15% accuracy by image pre-processing(e.g. trim redundant margin, normalise font size). Nov. 2013-Jan. 2014
- Experimented several models(e.g. SVM, linear regression) and got 82.1% accuracy using random forest.

# Majoraha: A Salary-Oriented Platform for College Major, Summer School Course Project

**UC Berkeley** 

- Presented the impact of college majors on future earnings in different career stages.
   July 2013-Aug. 2013
- Visualized breakdown of salaries in relation to majors by bar chart, line chart, pie chart and bubble chart using D3.js.

#### Role-Playing Game, Object-Oriented Programming

NTU

- Designed a map editor for utilising image elements and generating multiple relational maps. 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.

## **EXTRA CURRICULAR ACTIVITY**

Vice President Taipei, Taiwan

NTU Hackathon Organization

Mar. 2015-Aug. 2015

- Led an organization 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 the biggest hackathon event in Taiwan.
- Integrated cross-department communication and directed a technical team to build official websites, web game and bicycle tail light for marketing purpose. Technologies included NodeJS, ReactJS, AnuglarJS, Dart and Arduino.

# **SKILLS & INTERESTS**

**Proficient in:** Java, C/C++, SQL, PHP, JavaScript, NodeJS, HTML, Git; **Familiar with:** Python, MongoDB, ReactJS, UNIX shell script, LETFX;

Languages: Native in Mandarin; Fluent in English Interests: Street Dance, Swing Dance, Chinese History