# **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-Present

- Coursework: Database Systems, Data Mining, Data Science Principles, Computer Security; Anticipated Courses: Artificial Intelligence, Pattern Recognition and Machine Learning, Bayseian Network, Convex Optimization
- GPA: 4.0/4.0; 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%)

## **WORK EXPERIENCE**

Data Science Intern Taipei, Taiwan

Far EasTone Telecommunications Co.

Jan. 2017-Present

- Optimized MySQL database with 30000% improvement from exponential to linear time (e.g. 1 week to 30 mins);
   Expanded scalability of data wrangling system and paralleled tasks under Linux architecture.
- Extracted features from **billions** of daily machine-generated data; Transformed hundreds of time series and spatial attributes to business interpretable variables; Built customer satisfaction forecasting model using Python sklearn.
- Analyzed customer behavior and lifestyle from **7 million** users through trajectory mining and time series clustering using discrete wavelet transform; Eliminated anomaly data uising outlier detection.

Database Administrator Taipei, Taiwan

DiQi Inc. (Blockchain Technology Startup)

Oct. 2014-Feb. 2015

- Communicated with business partner and identified client needs, striking a balance between their requirements.
- Conducted in-depth research and analysis on user habits to design database schema.
- Constructed NoSQL server using MongoDB and monitored database performance on a daily basis; Established the network between Android client apps and server by socket programming using Java.

#### SELECTED PROJECTS

#### 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.
- Launched a movie database system using MySQL with PHP and Apache2 server handling 100,000+ data.

## Manipulating Drones by Gestures Recognition, Bachelor Thesis Project

Stanford

- Achieved 90%+ accuracy to recognize 8 gestures in real-time using K-nearest neighbor algorithm. Winter 2015
- Created a body-controlled drone system within 36 hours using Java to control Kinect and AR.Drone; Proposed speed-detection algorithms reducing 10-25% time delay caused by inertia forces.
- Represented NTU in 2015 Stanford Treehacks Hackathon, attracting 2 companies for potential cooperation.

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

NTU

• Explored text features using TF-IDF concept from online learning tutorials crawled by Python.

Spring 2014

Ranked 10 levels of documents difficulty for each query using semi-supervised learning.

# **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++, Python, SQL, Linux, Git
Languages: Native in Mandarin; Fluent in English

Familiar with: PHP, JavaScript, NodeJS, Languages: Street Dance, Coffee, Chinese History