

Po-Yi Du

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Seeking full-time position in data analyst/scientist to apply my 4-year data analytics experience, including data preprocessing, statistical analysis, design of experiment, machine learning prediction, and data visualization.

Education

The University of Arizona, Eller College of Management (Expected) May, 2017

- Master of Science in Management Information Systems; GPA: 3.7/4
- Research Track under the Supervision of **Dr. Hsinchun Chen**

National Cheng Kung University, College of Management Sept. 2011 – Jun. 2015

- Bachelor of Business Administration in Statistics

Projects and Research Experience

Master Project / Opinion Mining through Social Media for Nanotech Development Feb. 2017 – Present

- Utilized Latent Dirichlet Allocation to extract 13 underlying subtopics from nanotech-related articles
- Conducted content analysis on nano-related tweets to explore marketing insights of the 13 subtopics

Data Analytics / Pokémon Respawn Prediction: PokémonGo Data Analysis Sept. 2017 – Dec. 2017

- Constructed a Pokémon cooccurrence network to visualize spawning patterns with network metrics
- Established a next-spawning DecisionTree prediction model with 90+% accuracy for select Pokémons

Data Analytics / Stock Price Prediction through News Headlines Sentiment Mar. 2017 – May 2017

- Developed an automated process to collect and engineer news headlines into sentiment features
- Constructed Decision Tree model with AdaBoost to prediction stock trends with 70% accuracy
- Developed a user-interactive recommendation system to increase usability

Healthcare Analytics / Dialysis: Long-term Pattern Analysis Sept. 2014 – Jan. 2015

- Preprocessed Taiwan National Health Insurance Database (30GB) to a usable form through SAS
- Visualized analytical results to illustrate spatial and temporal patterns
- Constructed prediction models to identify high-risk individuals of renal failure with 95% accuracy

Work Experience

Research Assistant / Artificial Intelligence Laboratory / The University of Arizona Aug. 2016 – Present

- **Business Intelligence in DarkNet Marketplace (DNM): High-impact Opioid Product Prediction**
 - Developed a Support Vector Machine classifier to identify opioid listings from collected DNM dataset
 - Extracted and engineered features through Natural Language Processing
 - Utilized Extreme Gradient Boost classifier to predict high-impact opioid product with 95% accuracy
- **Hacker Web Data Collection Project**
 - Identified and crawled 2 major DNM's listings and seller information on Tor as research materials
 - Extracted, transformed, and loaded 300,000+ DNM html files into MySQL DB for research purpose

Teaching Assistant / Department of FEAM / Soochow University Aug. 2015 – Jul. 2016

- **Probability and Statistics**
 - Reinforced and created course materials for weekly TA sessions
 - Led Q&A, topic lectures assigned by professors for 5 probability and statistics courses

Data Analyst Intern / Clinical Research Center, University of California at Berkeley Jul. 2015 – Aug 2015

- **Corneoscleral Junction Project**
 - Explored variable relationships through descriptive analysis and statistical modeling
 - Cooperated with senior biostatistician, optometrists, and biomedical engineer to interpret results
- **Clinical Data Verification**
 - Ensured data quality by examining the raw data
 - Transformed the raw data into usable structure in Excel for analytic purposes

Professions & Skills

Programming and Analytic Tools
Database Management System
MS Productivity Tools
Certificate

Python, R, Java, SAS, Tableau, SPSS, AWS EMR
MySQL, Oracle SQL Developer, PostgreSQL, MS SQL Server
Word, Excel, PowerPoint, Visio, Project
SAS Base Programmer Certification for SAS 9