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, and data visualization.

Education

The University of Arizona, Eller College of Management (Expected) May, 2017
- Master of Science in Management Information Systems, Research Track

National Cheng Kung University, College of Management Sept. 2011 – Jun. 2015
- Bachelor of Business Administration in Statistics

Projects and Research Experience

Social Media Opinion Mining for Nano Development (Supervised by Dr. Hsinchun Chen) Feb. 2017 – Present
- Collected and preprocessed 100k+ tweets through Twitter API and Python script
- 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

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 Decision Tree prediction model with 90+% accuracy for select Pokémons

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 a Decision Tree model with AdaBoost to prediction stock trends with 70% accuracy
- Developed a user-interactive recommendation system to increase usability

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 for research purposes
- Extracted, transformed, and loaded 300k+ DNM html files into MySQL DB for research purposes

Teaching Assistant | *Department of FEAM* | *Soochow University* Aug. 2015 – Jul. 2016
- Reinforced and created course materials for Probability & Statistics and Calculus courses
- Led Q&A, topic lectures assigned by professors for five Probability & Statistics and one Calculus courses

Data Analyst Intern | *Clinical Research Center, University of California at Berkeley* Jul. 2015 – Aug 2015
- Explored variable relationships through statistical analysis and modeling for Corneoscleral Junction Project
- Cooperated with senior biostatistician, optometrists, and biomedical engineer to interpret results
- Transformed the raw data into usable structure in Excel and ensured data integrity for analytic purposes

Professions & Skills

Programming and Analytic Tools	Python, R, Java, SAS, Tableau, SPSS, AWS EMR
Database Management System	MySQL, Oracle SQL Developer, PostgreSQL, MS SQL Server
MS Productivity Tools	Word, Excel, PowerPoint, Visio, Project
Certificate	SAS Base Programmer Certification for SAS 9