Ji Zhang

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Portfolio: http://alexzhangji.github.io/   GitHub: https://github.com/AlexZhangji

EDUCATION

University of Southern California, Los Angeles, CA   **May 2019**
Master of Science, Data Informatics   **GPA 3.50**
Bachelor of Science, Computer Science   **Dean's List**, Major GPA 3.74

WORK EXPERIENCE

Irdeto, Los Angeles, CA   **Jan 2018 – Current**
Data Mining Intern - Part Time
• Creating pipeline for data extracting, cleaning and storing from millions of notices sending emails. Design and create visualization and report with Matplotlib/Seaborn and Tableau.
• Data mining on the email data, research to classify the potential autoreplies, integrated with sentiment analysis.

University of Southern California, Los Angeles, CA   **Mar 2017 - July 2017**
Research Assistant on Data Mining and Analysis
• Scarping tens of thousands of life science journals on US National Library of Medicine for list of drugs and FDA advisor using Python, evaluating publication's impact with Journal Citation Reports API.
• Data wrangling FDA advisor meeting documents and scarped data with multiple sources from FDA OpenData, check if advisor's financial ties with pharmaceutical companies affects approval decision.

Docket Calendar, Los Angeles, CA   **May 2016 - Aug 2016**
Full Stack Engineer Intern
• Created new features includes comments, profiles, emoji post, shared class system and more for backend API and frontend interface with AngularJS and PHP/Laravel.
• Refactored and optimized backend for existing event, task, calendar view, update mechanism and landing page. Reduced application initial loading time by 27 percent.
• Design and implemented interactive user data analysis and visualization portal with MySQL and HighChartsJS.

ZTE Corporation, Chengdu, China   **June 2015 - Aug 2015**
Software Developer Intern
• Prototyped a WeChat web application and chatbot in PHP, created and integrated voice and song recognition, location based recommendation, QR code login with detailed documents.

PROJECTS

Machine Learning Algorithms Implementations   *– Independent*   **Aug 2017 - On going**
• Python implementation and visualizations for Machine Learning algorithms, includes: Decision Tree, K-Means, GMM, PCA, Fastmap, PLA, Pocket, Linear Regression, Logistic Regression, SVM, HMM, Feed Forward Neural Network etc.

Unsupervised Game Hack Detection for PUBG Player Data   *– Independent*   **Sep 2017 - Nov 2017**
• Analyzed and visualized PUBG's data for 85,000 players on Kaggle, with Scikit-Learn, Pandas, Numpy and Matplotlib.
• Dimension reduction on the data using PCA, clustering and identifying potential players using hack, with K-Means.

Senior Capstone Project: EMR System with Healthcare Data Analysis   *– Group Project*   **Aug 2016 - Dec 2016**
• Designed and implemented core medical record display page and data visualization portals from ground up in JavaScript.
• Researched to refactor and extend OpenEMR with a responsive and intuitive design and streamlined functionalities.

Web Crawler with NLP and Data Visualization   *– Independent*   **Nov 2015 - Jan 2016**
• Developed a web crawler using Python, Requests and BeatifulSoup, customized for Reddit and Twitter.
• Integrated crawler with NLP and sentiment analysis to generate word cloud visualization and keyword sentiment charts.

Android Note Taking App with OCR and Cloud Synchronization   *– Independent*   **Nov 2015 - Dec 2015**
Shooting Star - 3D Multiplayer Spaceship Shooting Game on Unreal Engine *– Group Project*   **Jan 2015 - Apr 2015**

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, Scala, C++, PHP, Node, HTML/CSS.
Applications: MySQL, MongoDB, Tableau, Sqlite, Jira, Agile/Scrum, Git, Unreal Engine, Photoshop.
Operating Systems/Platform: AWS, Windows, Linux(Ubuntu/CentOS), Android, Firebase.
Frameworks/Libraries: Numpy, Spark, Hadoop, Matplotlib, Scikit-Learn, Pandas, AngularJS, HighCharts, Flask.