Pei Yingchi

Resume

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Education

2013 – 2017 **Business Analytics (Bachelor)**, *National University of Singapore (NUS)*.
- CAP: 4.91/5.0, Honours with Highest Distinction
- Winner of Lee Kuan Yew Gold Medal
- Five times Dean's Lister (Top 5%)

Work

2017 Jul-Present **Data Scientist**, *DataSpark, Singtel*, Singapore.
Work in the application team.
- Research on footfall analytics with telco data using machine learning algorithms. Implement and productionize those algorithms into our data analytics platform
- Develop intellectual property for the company by submitting research papers.
- Design and develop the network planning application for telco operators to reduce upgrading cost while improving customer experience. Build the application in scala and deploy it in a big-data environment

2016 December **Data Analytics Intern**, *ViSenze*, Singapore.
Fully in charge of the internal dashboards.
- Established the pipeline of internal metrics reporting by understanding the raw data, current data management system and the requirements from various team leaders
- Produced dashboards on system and business performance to enable stakeholders to make effective decisions, using Chartio and SQL
- Assisted the engineering team in database design

2016 May-Nov **Data Science Intern**, *DataSpark, Singtel*, Singapore.
Part of the product team at DataSpark.
- Worked in a big data environment with Hadoop as the data management platform and Apache Spark as the data processing engine
- Conducted several geolocation data analysis projects which added new features to our data solutions and improved the model accuracy
- Applied models such as Maximum A Posterior Estimation (MAP), Naive Bayes, Multinomial Logit Regression, and Support Vector Machine (SVM)
- Implemented reproducible code using R Markdown and Python for the projects
- Built interactive data visualizations (Web apps) using JavaScript, Node.js and React which are used by the clients and the consulting team

2015 May-Aug **Market Research Analysis Intern**, *Millward Brown*, Shanghai, China.
Work on a long-term marketing research project for Budweiser.
- Successfully prepared the 2015 Q1 report for Budweiser with another team member in time, which received a great response from the client
- Collected and complied the consumer survey data weekly using SPSS Survey Reporter
- Detected several problems and initiated deep dive research to find explanations

Publications

2018 Feb **Pei, Y.**, Ng, Y., Cai, Y., Li, Y. (2018).
"Geospatial Re-Distribution Methods for Footfall Count Estimation using Mobile Network Data", Submitted for Publication

2017   Ng, Y., **Pei, Y.**, Jin, Y. (2017).
"Footfall Count Estimation Techniques Using Mobile Data", 2017 IEEE 18th International Conference on Mobile Data Management (MDM), Daejeon, South Korea, 2017, pp. 307-314. doi: 10.1109/MDM.2017.49

Projects

2015 1st sem   **Bankruptcy Prediction Using 10-K Reports**, *BA Capstone Project*.
- Gathered data with over 50,000 records from 3 large financial databases
- The model assumptions and data consistency were carefully evaluated
- Investigated different methods such as resampling and cost-sensitive learning to deal with the imbalanced dataset
- Incorporated text-mining features such as fog readability and sentiment score to the traditional prediction model. The best model achieves testing AUC score 0.9

2014 2nd sem   **Twitter Follower Analysis For "@TopShop"**, *Data Mining Project*.
- The data of 20,000 Topshop followers were collected using R through the Twitter API
- A classifier was built to classify tweets into categories. Various methods such as Logistic Regression, Random Forests, SVM, and K-Nearest Neighbour were used
- The followers' account attributes were analyzed, and the results were aggregated and visualized using R and Tableau

Activities

2014 – 2015   **Teaching Assistant**, *IS1112 E-Business Essentials, NUS*.
- Crafted and compiled 4 question sets containing over 100 questions
- Provided assistance and feedback for the students throughout the course

2014 Summer   **Program Assistant**, *Egyptian Society for Integrated Development*, Cairo, Egypt.
Design and implement activities for underprivileged children.
- Survived a bomb attack.
- Gave lectures using audio-visual aids, role-playing and interactive games, resulting a 40% increase in the attendance rate. Organized a field tour about saving water

2013 – 2014   **Vice President**, *Chinese Society Chinese Orchestra, NUS*.
- Organized an annual welcome event, which resulted in a membership increase of 50%
- Expanded the influence of CSCO by organizing an annual music concert with more than 200 audiences
- Initiated 4 new events with the committee, including music talks and cultural exchange programs

Additional Information

Languages   Fluent in English and Mandarin. Know basic German (A1 level)

Skills   Statistics background with 12 statistics modules taken. Programming background with knowledge in Python, Scala, R, Spark, JavaScript, SQL and SAS

Interests   Music: Play the piano, the cucurbit flute and the Erhu

Sports: Taekwondo and Karate