Qiaochu Chen

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PROFESSIONAL EXPERIENCE

NTT DATA, Inc. Tokyo, Japan
Data Scientist, AI&IoT Division April 2019 - Present

- **Mobile App Optimization**
  - Optimized push notification algorithms, designed and performed A/B test analysis to evaluate the optimization, which resulted in a 1.3% increase in average push notifications open rate.
  - Defined metrics for a mobile news app (2 million+ MAU) for measuring user engagement.
  - Performed historical analysis on large-scale user activity logs to understand users' behavior and trends. (Python, SQL)
  - Performed feature engineering, built predictive models using *DataRobot* (an enterprise AI platform) to find factors and features that correlated to high retention rate. (Python)
  - Performed ad-hoc analysis, and presented weekly reports to senior management with findings and requested proposition.
  - Built customized dashboards using Tableau, from which cross-functional team members can effectively act upon.

- **Sales Forecasting**
  - Performed data extracting/manipulating/processing and created original sales dataset. (Python, SQL)
  - Performed historical analysis on product sales, reported market trends and relevant insights. (Python)
  - Built predictive models to forecast monthly sales of 300+ products using *DataRobot* and increased average RMSE by 13%.

- **Metrics Design for Risk Management**
  - Performed exploratory analysis on time series data to understand manufacturing processes and risks. (Python)
  - Defined metrics for different manufacturing scenarios to identify and quantify potential risks.
  - Transform result of analyses into reports, provided insights and strategy for risk management optimization.

- **Customer Targeting Optimization**
  - Built predictive models by using XGBoost to predict the likelihood that a customer would make a purchase so to select customers for further approach, which increased the number of sales by 16%. (Python)
  - Performed analysis on large-scale sales datasets and presented data-informed insights about customer targeting.
  - Presented findings and recommendations to senior leadership for strategic planning about promotion and marketing.

EDUCATION

University of Tokyo, School of Engineering Tokyo, Japan
Masters in System Engineering September 2016 – August 2018
Relevant Coursework: Machine Learning, Probability and statistics, Pattern Recognition, Linear Algebra

Tongji University, College of Electronic and Information Engineering Shanghai, China
Bachelor in Electrical Engineering September 2011 – August 2015

SKILLS

- **Programming:** Python (NumPy/Pandas/Scikit-learn/Matplotlib/Seaborn), SQL, C#, R, HTML, CSS, Java
- **Machine Learning:** Regression & Classification Methods (Linear/Logistic Regression, Tree-based Models, KNN, SVM), Clustering Methods (K-means/Hierarchical Clustering), Regularization, Resampling (Bootstrap/Cross-Validation)
- **Data Science & Miscellaneous Technologies:** A/B testing, ETL, Data science pipeline (Cleaning/Wrangling/Visualization/ Modeling/Interpretation), Statistics, Time series, Metrics design, Experimental design, Hypothesis testing, APIs, Git
- **Cloud & BI Tools**: AWS, Tableau, Alteryx, Microsoft Excel

PROJECTS

- Fish Image Classifier
  - Built an underwater drone with a fish-eye camera to collect images of tunas in fish cages.
  - Performed image pre-processing/augmentation to create 3000+ tuna images for training. (Python)
  - Built a fish image classifier using OpenCV for recognizing tunas with 87% accuracy, aiming to help fishermen to count tunas in fish cages and estimate profit before harvest time. (Python)

- Unmanned Solar-Boat
  - Designed, manufactured, and tested an autonomous boat powered by solar cells with a team of 7 members, run for the 20 km -course between Makino Sunny Beach and Chikubu Island.
  - Ranked 2nd in 22th Unmanned Solar-Boat Race at Biwa-lake (12 teams).

INTERESTS

Languages: Chinese (Native), Japanese(fluent), English(fluent)
Activities: Game Development (Unity), Weightlifting, Ukulele, Badminton, Mountain-climbing, Traveling & Hiking