Tengyu Song

(516)644-3959 | tengyu.song@columbia.edu | github.com/st3nv

EDUCATION

Columbia University New York, NY
M.A. in Statistics Expected, 12/2023
Shanghai University of Finance and Economics Shanghai, China
Bachelor of Science in Statistics (GPA:3.44/4.0) 09/2018 – 06/2022

- Third Prize for People's Scholarship (*Top 10%, 12/2019*)

INTERNSHIPS

Data Application Engineer Shanghai, China
JD. COM 09/2021 – 11/2021

- Delved into coupon data on JD.COM from the supply-side perspective. Built a coupon grading algorithm using GBDT to automatically detect and supply good coupons for customers. Boosted 7- day total GMV by 10%.
- Shorten company's average bug response time by 30% by creating a rating system for employee's efficiency based on productivity data.
- Performed anomaly detection on the R&D process flow data, combining both pre-made rules and Isolation Forest algorithm results.

Pizza Hut Data Analyst Shanghai, China
Yum China 06/2021 – 08/2021

- Investigated influence factors for customer activation and retention using Random Forest. Managed to reactivate 1,000+ Pizza Hut members by SMS marketing.
- Processed 2M+ users' purchasing data from 2019 with Hive and Impala, created pipeline to extract, visualize and analyze customers' buying pattern from Data Lake for better personalized advertising.
- Generated 20 hypotheses about user behaviors, as well as performing permutation testing to get business insights.

RESEARCH & LEADERSHIP

Shanghai University of Finance and Economics Shanghai, China
*Undergraduate Researcher***,** Advisor: Prof. Wu Chunjie 08/2021 – 12/2021
Project: Defect Detection of Cells

- Utilized Mask-RCNN model in TensorFlow to perform multi-category instance detection on photographed images of PV cell appearance. Achieved 90% recognition accuracy on the testing set.
- Devised a fast-and-precise PV cell image cropping algorithm using OpenCV to enhance the model performance. Significantly reduced the difficulty of identification (Increased AP50 by 2%).

Team Leader, Advisor: Associate Prof. He Xin 03/2021 – 06/2021
Project: SUFE Rating Desktop Version

- Led a team of 15 that created the most influential professor rating platform on campus, with up to 20,000+ users and 15,000+ highest number of visits in a single day
- Built, maintained, and optimized application through SQL and VB.NET; implemented 10+ functions such as user system, fuzzy search using VB.NET; fixed the slowdown issue led by optimizing SQL queries.

SKILLS & INTERESTS

Technical: SQL, Python, R, SAS, Java, C, JavaScript, HTML/CSS, SPSS, Matlab, and MS Office
Interests: Reading, Bowling, Table Tennis, Go Karting