# **Tengyu Song**

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

#### **EDUCATION**

**Columbia University** 

Shanghai, China

M.A. in Statistics Expected, 12/2023

Shanghai, China

**Shanghai University of Finance and Economics** 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 09/2021 - 11/2021

JD. COM

- Shorten company's average bug response time by 30% by creating a rating system for employee's efficiency.
- Delved into coupon data on the 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- days platform's total GMV by 10%.
- Performed anomaly detection on the R&D process flow data using data engineering and random forest model.

#### Pizza Hut Data Analyst

Shanghai, China

Yum China

06/2021 - 08/2021

- Investigated influence factors for customer activation and retention using linear regression model. 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 PV cell image enhancing algorithm by cropping out the background using OpenCV. 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 databases through SQL and VB.NET; implemented 10+ functions such as user login, course search, and 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