

Jinjia Zhang

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EDUCATION

Brown University
M.S. in Data Science

Class of 2026
Providence, RI, U.S.

Duke Kunshan University (DKU) & Duke University Dual Degree
B.S. in Data Science (DKU)
B.A. in Interdisciplinary Data Science (Duke)

Class of 2024
Kunshan, Jiangsu, China
Durham, NC, U.S.

■ GPA: 3.75/4.0

■ Courses: Calculus, Linear Algebra, Probability and Statistics, Introduction to Programming and Data Structures, Numerical Analysis and Optimization, Algorithms and Databases, Principles of Machine Learning, Statistical Machine Learning, Data Acquisition and Visualization, Interdisciplinary Data Analysis, Computer Vision

PROFESSIONAL EXPERIENCE

Kingdee International Software Group

Jul-Sep 2023

Intern in Data Analysis

Jinan, Shandong, China

- Conducted in-depth data analysis on customer engagement metrics such as customer scale and degree of activity, utilizing tools such as Python and SQL. Developed and implemented over 50 SQL queries to extract, transform, and load data from diverse sources.
- Use the Prophet model designed by Facebook to forecast customer behavior and optimize marketing strategies. Reduced the model RMSE by 18% (compared with previous methods) through rigorous testing and hyperparameter tuning, leading to more precise customer targeting.

Shanghai Zidan Printing Co. Ltd

May-June 2023

Intern in Python/Machine Learning

Shanghai, China

- The goal is to predict the possible application scenarios of a new product before releasing it to the market.
- Inspected elements of websites, scrapped and collected 3,000+ pieces of data of similar products from shopping websites, cleaned data using Python, and classified the products into 5 clusters using unsupervised learning methods: K-means and Latent Dirichlet Allocation, served for the establishment of the predicting model.
- Collected 10+ technical parameters of those products from the Bureau of Quality Supervision as the training data set, built a model to predict the possible clusters of the new product, and evaluated its likely application scenario, which can be a significant reference for releasing the new product.

CITIC Securities

Jul-Aug 2022

Intern in Marketing Dept.

Guangdong, Guangzhou, China

- Cleaned and analyzed 5,000+ pieces of data on the price of CSI 500 stocks in recent years using Python and visualized the stock's tendency on Tableau. Added Interaction terms.
- Built LSTM model on CSI 500 to predict the tendency of stocks and financial products, helping investors make decisions.
- Using the D3 library in JavaScript, make a website and use a candle chart to show the future trend of the CSI 500 index.

RESEARCH EXPERIENCE

The Global Health Research Center (GHRC) at DKU

Mar 2023-May 2023

Study on Death Reason Classification: Group Member

Kunshan, Jiangsu, China

- The target is to design an auto-classification machine that can automatically classify the death reason based on patients' clinical diagnoses written by doctors.
- The given data contains the diagnosis texts and the death reasons. We extracted features of the texts using Word2Vec in clinical diagnoses based on 12 death reasons and 2,300+ clinical diagnoses.
- Built a Support Vector Machine model and predicted death reasons for new patients with an 80% accuracy of classification.

Summer Research at SJTU

June 2023-Aug 2023

Study on Text-to-Image Generation by GAN: Group Member

Shanghai, China

- Achieved text-to-image generation by building two generative adversarial network (GAN) models—Attention-Guided GAN (Attn-GAN) and Semantic-Spatial Aware GAN (SSA-GAN) and utilizing the COCO dataset and the CUB dataset.
- Compared the performances of the two models and ultimately provided a comprehensive comparison of these two models.
- The work is published on CONF-SPML 2024.

LEADERSHIP & SERVICE

Zu Chongzhi Center for Mathematics and Computer Science at DKU

Oct 2021-Dec 2021

Teaching Assistant: Calculus

Kunshan, Jiangsu, China

- Managed 30+ students for the calculus course, invigilated two exams, gave three biweekly quizzes, and answered questions after recitations.
- Prepare recitations by recording the confused part of students using two surveys each week.

ADDITIONAL INFORMATION

Languages: English (fluent), Mandarin (native)

Skills: Python, C, Java, SQL, JavaScript, HTML, MATLAB, R, PyTorch

Awards: 2023 MCM: S Award, Dean's List: Spring 2022

Publications: Zhang, Jinjia. A Comparative Analysis and Investigation of Attn-GAN and SSA-GAN for Text-to-Image Generation, 2023, Published on CONF-SPML 2024.

Patents: Zhang, Jinjia. Omnidirectional Tracked Vehicle. Patent Number: 201810354508X. Issued by China National Intellectual Property Administration. Published on October 12, 2020.