Jane Zou

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Education

University of California, Los Angeles, *B.S. Statistics & Data Science* 2021 - 2024

GPA 3.914/4.000

Cornell University, *Machine Learning Foundations* 2022 - 2023

Publications

1. Jane Zou, et al. "An Artificial Intelligence-Based Prognostic Model for Prediction of Functional Glaucoma Progression from Clinical and Structural Data." Investigative Ophthalmology & Visual Science 65, no. 7 (June 2024): 1624.

2. Jane Zou, et al. "Total Deviation vs. Absolute Threshold Sensitivities for Measuring Pointwise Rates of Change." Investigative Ophthalmology & Visual Science 65, no. 7 (June 2024): 1871.

3. Jane Zou, et al. "Comparative Outcomes of Primary Trabeculectomy with Mitomycin C in Patients of Hispanic vs. European Descent." Investigative Ophthalmology & Visual Science 65, no. 7 (June 2024): 3516.

4. Jane Zou, et al. "Detection of Functional Glaucoma Progression: 24-2 Visual Field Central Points vs. 10-2 Visual Fields." Investigative Ophthalmology & Visual Science 65, no. 7 (June 2024): 4814.

5. Jane Zou, et al. "Prediction of Functional Glaucoma Progression Combining Baseline Clinical and Structural Data with a Deep Learning Model." 2024 American Glaucoma Society Annual Meeting (March 2024).

Work Experience

PricewaterhouseCoopers June 2023 - August 2024

Data Scientist

Developed an automated global tax incentives matching system using generative AI, reducing processing time by 99% and improving accuracy by 85%.
Built frontend with Streamlit and backend with FAST API; integrated Azure Form Recognizer for document parsing with over 99% accuracy.
Enhanced predictive ML models using demographic profiling and NLP.

Jules Stein Eye Institute May 2023 - June 2024

Data Scientist

Automated visual field examination detection by imputing over three decades of missing patient data, enhancing diagnostic accuracy with a 30% improvement in model reliability.
Integrated advanced AI models into clinical workflows, optimizing healthcare operations.

Chelle AI January 2024 - March 2024

Senior Strategy Consultant

Developed knowledge graphs using web scraping techniques and NetworkX for data structuring and analysis.

OkTY September 2023 - December 2023

Senior Strategy Consultant

Led a team in cleansing and analyzing financial and merchant datasets to uncover trends in user spending.

National Student Data Corp   July 2023 - September 2023

Senior Data Specialist

Directed data science teams, implementing Agile methodologies and developing predictive models for pedestrian data analysis.

SARE Ladies   April 2023 - June 2023

Senior Strategy Consultant

Applied label encoding to survey responses dataset, assigning unique numerical values to each category.
Developed a random forest feature importance ranking model to identify characteristics impacting the confidence of survey respondents, focusing on ethnicity and whether they identify as real estate investors.

EpiData   September 2022 - March 2023

Senior Strategy Consultant

Led the development of a machine learning pipeline for IoT data, implementing regression and classification models for insightful findings.

Epicenter for Action Research   March 2023 - May 2023

Product Manager, Full Stack Developer

Led the development of a user-friendly platform for reserving affordable parking spots for the LA Olympics 2028, utilizing UX design expertise.
Conducted user research, created wireframes, and performed competitive analysis. Proficient in Figma for designing wireframes, mockups, and prototypes.
Applied user-centered design principles, conducted market research, and translated business objectives into actionable design solutions. Applied design thinking methodologies to drive innovation and problem-solving.

American Express   June 2022 - December 2022

Lead Machine Learning Engineer

Led a team of three in developing an end-to-end machine learning pipeline employing unsupervised learning techniques.
Calculated arrival probability from consumer campaign data to optimize marketing investment, identifying high ROI consumers.
Proficient in Python libraries including Pandas, NumPy, and Scikit-learn, utilized various machine learning techniques such as decision trees, neural networks, and ensemble methods like random forests for model development in Jupyter Notebook.

Innovate@UCLA   March 2022 - May 2022

Product Manager, Full Stack Developer

Directed the development of a user-friendly platform HYREUS, a recruiting platform designed for young adult job seeker.
Conducted user research, devised wireframes, and executed competitive analysis.
Proficient in Figma for crafting wireframes, mockups, and prototypes.
Applied user-centric design principles, conducted market research, and translated business goals into practical design solutions.
Employed design thinking methodologies to foster innovation and problem-solving.

HomeDescription   January 2022 - June 2022

Project Consultant

Developed a custom three-dimensional scatterplot function in my programming work to effectively visualize trends between two variables of interest and price.
Generated correlograms to illustrate correlation coefficients between the relevant variables.
Conducted web scraping and HTML parsing on Zillow data.

Savi   October 2021 - December 2021

Project Consultant

Developed a heatmap visualization in Python to model correlations between variables of interest and user paid conversion rate, alongside creating histograms to assess the impact of marital status on binary payment status.

Projects

Sustainable Los Angeles Grand Challenge   September 2023 - Present

Principal Investigator

Contributing to projects addressing environmental challenges with strong analytical skills.

QWER Hacks   January 2023

Designed "Homeless Simulator," a game addressing houselessness experiences, securing first place in the housing insecurity track and first place for mobile app development.

American Statistical Association DataFest   May 2022

Created data visualizations and conducted research on drug resistance efficacy and adolescent behavior using Python.

Awards

Visa & Society of Women Engineers Scholarship	May 2023
Third Place Break Through Tech AI @ UCLA, MIT, Cornell Tech AI Studio	March 2023
UCLA Machine Learning Top Contributor	March 2023
Major League Hacking Housing Insecurity First Place	February 2023
Major League Hacking Best Mobile App	February 2023

Professional Membership

Undergraduate Research Scholars Program	2023 - 2024
AT&T Technology Academy	2023
DataResolutions	2021 - Present
Society of Women Engineers	2021 - 2023

Technical Experience

Programming Languages: Python, R, SQL, C++, JavaScript
Machine Learning: Supervised & Unsupervised Learning, NLP, Time Series Analysis, AI Ethics
Tools & Platforms: TensorFlow, PyTorch, FAST API, OpenAI, Langchain RAG, Streamlit, Power BI