Wuxie Li

Summary

Motivated student who possess a foundation in data analysis, machine learning, and deep learning frameworks such as PyTorch. Deeply passionate about research and mathematics, I am committed to advancing my expertise in mathematical and statistical methodologies, with a focus on their practical modeling applications and implementation within artificial intelligence. Currently, I am pursuing advanced studies in Mathematical Statistics, Optimization Theory, Python programming, and Diffusion Models.

1 Education

Nankai University Engineering Experimental Class

September 2023 – August 2024
Completed a rigorous fundamental curriculum including High Level Language Program Design 2-1(4.0), Linear Algebra(3.7), Higher Mathematics(3.7), Probability and Mathematical Statistics(3.7).

Nankai University School of Statistics and Data Science

(Major Switch)
August 2024 – Present
Developed strong analytical and computational skills with courses such as Mathematical Analysis I(4.0), Advanced Algebra and Analytic Geometry I(4.0), Theory of Probability(3.3) and Database System(3.3).
Achieved an overall GPA of 3.55/4.0, ranking in the top 25% of the class.
Demonstrated academic excellence in major-specific courses, maintaining a GPA of 3.323/4.0 and ranking 27.6%.

2 Skills & Certifications

- Programming & Data Analysis: Python, C++, ArcMap, statistical modeling, data visualization
- Language: Proficient in English (CET-6: 553)
- Documentation: LaTeX & Markdown

3 Research Interests

- Deep Learning & Diffusion Models: Passionate about advancing the field of deep learning with a particular focus on probabilistic modeling.
- Technical Ability: Self-taught generative models including GANs, VAEs, and diffusion models (DDPM, DDIM).
- Ongoing Learning: Currently expanding expertise in score-based generative modeling.

4 Project Experience

Interdisciplinary Contest in Modeling (ICM) 2025
Data Science & Cybersecurity Analysis
January 23 – January 27, 2025
Project Overview: Teamwork to implemented a data-driven analysis of cybersecurity crime trends by integrating machine learning techniques with policy review, focusing on crime distribution over time and across regions. Proposed a policy paradigm for cybersecurity governance based on data-driven insights.

- Conducted extensive data mining from cybersecurity crime databases and national policy documents.

- Applied statistical methods such as cluster analysis, principal component analysis, and difference-in-differences (DID) models to identify patterns and trends.
- Designed and implemented data processing pipelines and visualizations using Python and ArcMap.

Outcome:

- Delivered actionable insights on regional cybercrime dynamics that informed strategic policy recommendations.
- Enhanced the overall data visualization framework, resulting in clearer, more accessible reports for interdisciplinary stakeholders.