Wuxie Li

Summary

Innovative and detail-oriented student with a strong foundation in statistics and artificial intelligence, demonstrated through rigorous academic performance and hands-on project experience. Possess a solid 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.

1 Core Competences

- Data Analysis & Statistical Modeling
- Basic Knowledge of Machine Learning & Deep Learning
- Python & C++ Programming
- Familiar with Generative Models (GAN, VAE, DDPM, DDIM, etc.)
- Data Visualization & Processing
- Problem-Solving & Critical Thinking
- Independent Learning
- LaTeX & Markdown Writing

2 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%.

3 Research Interests

- Deep Learning & Diffusion Models: Passionate about advancing the field of deep learning with a particular focus on probabilistic modeling.
- Technical Expertise: Self-taught in the PyTorch framework with hands-on experience in generative models including GANs, VAEs, and diffusion processes (DDPM, DDIM).
- Ongoing Learning: Currently expanding expertise in score-based generative modeling to explore innovative solutions in data-driven problem solving.

4 Project Experience

Interdisciplinary Contest in Modeling (ICM) 2025
Data Science & Cybersecurity Analysis
January 23 – January 27, 2025
Project Overview: Led 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.

Achievements:

- 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.

5 Skills & Certifications

- Programming & Data Analysis: Python, C++, ArcMap, statistical modeling, data visualization
- Languages: Proficient in English (CET-6: 553)
- Technical Tools: Experience with deep learning frameworks (PyTorch) and probabilistic generative models
- Analytical Thinking: Possess a solid foundation in mathematics and programming.