

EDUCATION

9/2021 6/2024(Expected)	-M.S., Hunan Normal University Computer Science, GPA:3.6/4.0, Rank: top 5%	Changsha, China
9/2016 - 6/2020	B.S., Yangtze Normal University Computer Science, Rank: top 10%	Chongqing, China

EXPERIENCE

9/2021 – Present	Graduate Research Assistant, Hunan Normal University <i>Supervisor: Prof. Lianming Zhang</i> Published an IEEE Transactions on Industrial Informatics paper. Published an Information Sciences paper and an Journal of Information Security and Applications paper.	Changsha, China
10/2023 – Present	Gameplay Programmer, Develop at Ubisoft, Intern • Single-handedly developed and designed an unannounced 2D line-based game project using C++. • Innovated a game structure with separated data, logic, and display layers, utilizing the breadth-first-search algorithm for UI construction. C++ / Game Programming	Shanghai, China
6/2023 – 8/2023	Machine Learning Engineer, Contemporary Ampere Technology Co., Limited, Intern • Designed model architectures based on Large Language Model (LLM) (e.g., LLaMa, LLaMa2, ChatGLM) for office automation systems, including dialogue systems and search engines. • Successfully deployed, trained, and fine-tuned LLMs, achieving a significant 20% increase in accuracy on targeted tasks. Python / Pytorch / LLM / Machine Learning	Ningde, China
5/2018 – 11/2018	Research Assistant, Yangtze Normal University <i>Supervisor: Prof. Keke Shang</i> Spearheaded a data-driven project focused on weather forecasting, deploying advanced machine learning to optimize predictive models.	Chongqing, China

PUBLICATIONS

2023	TMANomaly: Time-Series Mutual Adversarial Networks for Industrial Anomaly Detection Lianming Zhang, Wenji Bai , Xiaowei Xie, Liying Chen, Pingping Dong <i>IEEE Transactions on Industrial Informatics</i>	link
2022	MANomaly: Mutual adversarial networks for semi-supervised anomaly detection Lianming Zhang, Xiaowei Xie, Kai Xiao, Wenji Bai , Kui Liu, Pingping Dong <i>Information Sciences</i>	link
2023	A data-driven network intrusion detection system using feature selection and deep learning Lianming Zhang, Kui Liu, Xiaowei Xie, Wenji Bai , Baolin Wu, Pingping Dong <i>Journal of Information Security and Applications</i>	link

PROJECTS

6/2023 – Present	DiffuMAN (Diffusion-Mutual Adversarial Network) for Generation Task • Developed a generation task using the Diffusion Model and Mutual Adversarial Network. • Led the entire project, including data processing, model design, and training. Python / Pytorch / Diffusion Model / Deep Learning	
7/2022 – 6/2023	Anomaly Detection on Time-Series Data in Industrial Internet of Things (IIoT) Systems Using Deep Learning Model • Developed an innovative reconstruction model to detect anomalies in time-series data, utilizing Generative Adversarial Networks (GANs) and Mutual Adversarial Networks for effective identification of data irregularities. • Attained a remarkable 99.75% precision rate, aligning closely with top-performing methods in industrial contexts. • Spearheaded the coding and authoring of research papers, covering key aspects such as data preprocessing, model architecture design, and training process. Python / Pytorch / GAN / Adversarial Machine Learning	

10/2021 – 3/2022 **A Data-Driven Network Intrusion Detection System Using Feature Selection and Deep Learning**

- Developed FS-DL, a data-driven Network Intrusion Detection System (NIDS) that uses feature selection and deep learning to improve data quality and detection accuracy
- Led data processing and the design of the deep learning model, successfully deploying the system in the Software-Defined Networking (SDN) controller for online detection of abnormal traffic.
Python / Pytorch / SDN

1/2022 **GGJ2022 Pixel Art RPG Puzzle Game Project - "The Gift"**

- Led the team as the project leader in planning, development, and music production. Successfully released the game, garnering over 100 downloads and receiving positive user reviews.
- Designed the core gameplay mechanics and level progression system for the game.
C / C++

AWARDS

National Scholarship, Hunan Normal University, 2023.
Provincial Third Prize in Hunan Mathematical Modeling Competition, Hunan Normal University, 2023.
The First Prize Scholarship, Hunan Normal University, 2022.
Merit Student, Hunan Normal University, 2022.
The First Prize Scholarship, Yangtze Normal University, 2017.
Software Designer Certification, Yangtze Normal University, 2018.
Merit Student, Yangtze Normal University, 2017.

TEACHING EXPERIENCE

Teaching Assistant, *Lecturer: Computer Organization and Principles, Computer Networks.* Fall 2018
Teaching Assistant, *Lecturer: Operating Systems, Database Systems.* Fall 2018
Mentor, Codementor Fall 2021

SERVICE

2022 World Computing Conference, Facilitator.

SKILLS

Technical: Python, Pytorch, C++, C, Java, SQL, JavaScript, HTML, Matlab, Docker.
Language: English, Chinese(native)