# Chengze Du

ducz.Monickar@gmail.com https://Monickar.github.io

## **EDUCATION**

# Beijing University of Posts and Telecommunications(BUPT)

Bachelor of Science in Information Security, School of Cyberspace Security

- Average Scores: 87/100 (GPA: 3.56/4)
- The Second Prize Scholarship (top 15%)

## **REARCH INTERESTS**

Network Tomography, Deep Learning, Differential Privacy, Artificial intelligence of things

# **PUBLICATIONS & PATENTS**

[1] Chengze Du, Guangzhen Yao at al. (2025). GuidedLatent: Defending VAEs against Membership Inference Attacks via Distribution-Guided Privacy. International Joint Conference on Neural Networks (IJCNN 2025).

[2]Chengze Du, Zhiwei Yu, Xiangyu Wang (2025). Identification of Path Congestion Status for Network Performance Tomography using Deep Spatial-Temporal Learning. *Computer Communications (in press)*.

[3]Chengze Du, Jibin Shi, Hui Xu and Guangzhen Yao. (2025).SecureNT: Smart Topology Obfuscation for Privacy-Aware Network Monitoring. International Conference on Intelligent Computing (ICIC 2025)

[4]Chengze Du, Shengli Pan, Chengbo Jiao. (2024). End-to-End Identification of Network Path Congestion Status Based on Adversarial Autoencoders. *Chinese Patent*. (Substantive Examination)

## **REARCH EXPERIENCE**

#### Undergraduate Research Assistant@BUPT

**Project 1**:Identifying Path Congestion Status for Network Tomography with Deep Learning Nov. 2023 – May. 2024

- **Description:** This project improves network tomography by introducing the concept of Additive Congestion Status to address limitations in accurately identifying congested network links. By integrating Adversarial Autoencoders (AAE) with Long Short-Term Memory (LSTM) networks, our method categorizes and quantifies congestion, leveraging spatio-temporal data to enhance link performance inference and congestion localization, outperforming traditional threshold-based algorithms.
- Contributions: Methodology, experiments, data analysis/visualization, writing
- Achievements: Authored and submitted the research paper as the first author, and applied for a patent as the primary inventor.

**Project 2**: Adversarial Network Boolean Tomography

- **Description:** This project enhances network boolean tomography to detect and localize congestion attacks on network links. By employing multi-timeslot observations and optimizing the F-measure to reduce the False Negative Rate (FNR), our approach improves upon traditional methods, offering more accurate and robust monitoring of network congestion in adversarial environments.
- Contributions: Experiments, data analysis/visualization

### Work Experience

#### Zhipu AI, AI Department

Engineering Internship

#### SKILLS

Languages: Python(Pytorch, Keras, Pandas, SciPy, SkLearn, etc.), C/C++, Bash, Latex Technologies/Frameworks:: NS-3 Network Simulator, Docker, Server Maintenance (Linux)

#### MISC

Interests: Passionate about running, with personal bests of 21:21 for 5km and 1:45:28 for the half marathon.

Beijing, China Sep. 2021 – Jun. 2025

Jun. 2023 – Apr. 2024

Beijing, China

Oct. 2024 - Jan. 2025

Beijing, China