

# Haoyu Feng

(+86) 18584656910 | [haoyufeng@stu.pku.edu.cn](mailto:haoyufeng@stu.pku.edu.cn) | [digitaloctet.github.io](https://github.com/digitaloctet) |  DigitalOctet

No.5 Yiheyuan Road, Haidian District, Beijing, Republic of China

## BIO

---

I am a first-year Ph.D. student in the Programming Languages Lab at Peking University, where I am advised by Prof. Xin Zhang. Previously, I obtained my B.S. degree from the School of Electronics Engineering and Computer Science, Peking University. My current research interest focuses on program analysis.

## EDUCATION

---

- **Peking University** Sept. 2025 - Present  
*Ph.D. in Computer Science, advised by Prof. Xin Zhang*  
Beijing, China
- **Peking University** Sept. 2021 - June 2025  
*B.S.(summa cum laude) in Information and Computational Sciences, advised by Prof. Xin Zhang*  
Beijing, China
  - GPA: 3.823/4 (rank 17/134)

## RESEARCH EXPERIENCE

---

- **Peking University** May 2024 - June 2025  
*Research assistant, supervised by Prof. Xin Zhang*  
Beijing, China
  - Topic: GPU-accelerated loopy belief propagation for program analysis.
  - Designed and implemented a GPU-accelerated framework of loopy belief propagation optimized for program analysis.
- **Peking University** Jan. 2024 - Apr. 2024  
*Research assistant, supervised by Prof. Xin Jin*  
Beijing, China
  - Topic: Efficient fault-tolerant stateful serverless computing.
  - Conducted experiments including read and write primitives under various request rates, end-to-end performance in the presence of function failures and retries, and end-to-end performance when overlapping logging with program execution.

## TEACHING EXPERIENCE

---

- **Teaching assistant** - Introduction to Computer Systems, Peking University Sept. 2023 - Jan. 2024
- **Teaching assistant** - Introduction to Discrete Mathematics, Peking University Sept. 2025 - Present

## PUBLICATIONS

---

- [1] Sheng Qi, **Haoyu Feng**, Xuanzhe Liu, and Xin Jin. 2025. Efficient Fault Tolerance for Stateful Serverless Computing with Asymmetric Logging. *ACM Trans. Comput. Syst.* 43, 1–2, Article 3 (May 2025), 43 pages.  
<https://doi.org/10.1145/3725985>
- [2] **Haoyu Feng** and Xin Zhang. 2025. GPU-Accelerated Loopy Belief Propagation for Program Analysis. Preprint.  
<https://arxiv.org/abs/2509.22337>

## SCHOLARSHIPS AND AWARDS

---

- **Tianchuang Scholarship**, EECS, Peking University Dec. 2024
- **Award for Scientific Research**, Peking University Dec. 2024
- **Award for Academic Excellents**, Peking University Dec. 2023
- **UBIQUANT Scholarship**, Peking University Dec. 2022
- **Merit Student**, Peking University Dec. 2022

## SKILLS

---

- **Programming Languages:** C, C++, Python, Rust, Java, Go
- **Languages:** Chinese, English