

EDUCATION	Carnegie Mellon University <i>Ph.D. in Software Engineering</i> <ul style="list-style-type: none"> • CQPA: 4.11/4.00. • Advisors: Prof. Christian Kästner and Dr. Chris Timperley • Research Interest: Safety and security for ML-enabled systems 	Pittsburgh, PA, USA Aug. 2024 - May 2029 (Expected)
	Tsinghua University <i>B.Eng. in Computer Science and B.Ec. in Economics & Finance</i> <ul style="list-style-type: none"> • CGPA: 3.91/4.00, Rank: 2/12. • Thesis (Honored): A Reinforcement Learning Framework for Training and Testing in Asset Portfolio Optimization • Advisors: Prof. Maosong Sun and Prof. Junliang Xing 	Beijing, China Sept. 2020 - July 2024
PUBLICATIONS	<ol style="list-style-type: none"> 1. From Hazard Identification to Controller Design: Proactive and LLM-Supported Safety Engineering for ML-Powered Systems Yining Hong, Christopher S. Timperley, Christian Kästner. <i>International Conference on AI Engineering (CAIN)</i>, 2025. 2. What Is Wrong with My Model? Identifying Systematic Problems with Semantic Data Slicing Chenyang Yang, Yining Hong, Grace Lewis, Tongshuang Wu, Christian Kästner. <i>International Conference on Automated Software Engineering (ASE)</i>, 2024. 3. Two Heads Are Better Than One: Exploiting Both Sequence and Graph Models in AMR-To-Text Generation Yining Hong, Fanchao Qi, Maosong Sun. 	
INDUSTRY EXPERIENCE	Advanced Micro Devices (AMD) Beijing, China <ul style="list-style-type: none"> • Optimized FPGA-based deep learning compiler to improve runtime performance. 	Jan. 2024 – June 2024
	Kuangshi Technology (Megvii) Beijing, China <ul style="list-style-type: none"> • Integrated machine learning models into autonomous driving systems. • Designed and implemented guardrails for object trajectory prediction models. 	Sept. 2023 – Dec. 2023
AWARDS AND HONORS	<ul style="list-style-type: none"> • Outstanding Graduate, CST Department, Tsinghua University July 2024 • Comprehensive Excellence Scholarship (top 10%), Tsinghua university Nov. 2023 • Citadel Securities Scholarship, Citadel Securities, Dec. 2022 • Comprehensive Excellence Scholarship (top 10%), Tsinghua university Nov. 2022 • Academic Excellence Scholarship (top 30%), Tsinghua university Nov. 2021 • Sports Excellence Scholarship, Tsinghua university Nov. 2021 • First Prize, National Olympiad in Informatics in Provinces Nov.2018 • First Prize, National Olympiad in Informatics in Provinces Nov.2017 	
SKILLS	<p>Programming Languages: C/C++, Python, JavaScript/TypeScript, Rust, Solidity, Verilog/SystemVerilog, VHDL, RISC-V Assembly, Make/CMake</p> <p>Frameworks/Libraries: FastAPI, Jupyter Notebook, NumPy, Pandas, PyTest, PyTorch, GoogleTest, React, Vue.js, HTML/CSS, Cocos, Qt</p> <p>Safety/Security: Threat Modeling, STRIDE, STPA, FMEA, HAZOP, FTA, OWASP Top 10</p> <p>Tools/Platforms: Docker, Git, GitHub/GitLab CI/CD, Jenkins, Grafana, Prometheus, MLflow, MySQL, Vivado, L^AT_EX</p>	

TEACHING EXPERIENCE	Center for Student Learning and Development, Tsinghua University Beijing, China <i>Volunteer Teaching Assistant (Outstanding Level)</i> Mar. 2022 - July 2024 <ul style="list-style-type: none"> Offered drop-in tutoring for computer science and finance courses. 	
MENTORING	Aarya Doshi <i>Undergraduate from Georgia Institute of Technology</i> <ul style="list-style-type: none"> Explored safety analysis and control for AI agents. 	Pittsburgh, PA, USA May 2025 - Aug. 2025
	Abhishek Satpathy <i>Undergraduate from University of Virginia</i> <ul style="list-style-type: none"> Explored threat modeling for ML-enabled systems. 	Pittsburgh, PA, USA May 2025 - Aug. 2025