

EDUCATION

- Sept. 2023 – **Rutgers University**, *Ph.D. student in Computer Science, USA*
Present Advised by Prof. Aarushi Goel and Prof. Xiong (Leo) Fan.
- Sept. 2019 – **Rutgers University**, *M.S. in Computer Science, USA, GPA:3.85*
May 2023
- Sept. 2012 – **Sun Yat-sen University**, *B.E. in Software Engineering, China*
Jun. 2016

PUBLICATIONS

- [IEEE Euro S&P 2026] **Yuange Li** and Xiong Fan, SUMMER: Recursive Zero-Knowledge Proofs for Scalable RNN Training, In: *IEEE European Symposium on Security and Privacy (EuroS&P)*, pp. 99–117, 2026
DOI: 10.1109/EuroSP68448.2026.00018

RESEARCH PROJECTS

Verifiable Information Retrieval System, *In Progress*

- Developing cryptographic verification techniques for correctness and integrity of queries over large-scale, dynamically evolving data systems.
- Designing scalable architectures for verifiable data systems that support incremental updates and efficient consistency guarantees.
- Optimizing proof-generation pipelines to maintain succinctness and low latency under high-throughput workloads.

SUMMER: Recursive Zero-Knowledge Proofs for Scalable RNN Training, *[IEEE Euro S&P 2026]*

- Designed and implemented the first end-to-end Zero-Knowledge Proof of Training (zkPoT) system for Recurrent Neural Networks (RNNs).
- Developed a unified verification pipeline for Backpropagation Through Time (BPTT), combining sumcheck-based proofs for linear layers and LogUp-style lookup arguments for non-linear activations.
- Achieved constant proof size and verification time independent of training iterations via recursive proof composition (IVC), outperforming state-of-the-art baselines by 8.5x in proving speed and 11.6x in memory efficiency.

Ontology-Based Decision Making for Autonomous Vehicles, *Visiting Scholar @ Technical University of Munich*

- Leveraged Web Ontology Language (OWL) to design semantic reasoning models for Advanced Driver Assistance Systems (ADAS), enhancing environmental perception capabilities.
- Engineered hierarchical traffic situation ontologies to support complex autonomous navigation and conflict resolution at dynamic road intersections.
- Formulated an ontology integration framework to improve high-level decision-making processes for autonomous systems in unstructured traffic environments.

WORK EXPERIENCE

- May 2026 – **Chainlink Labs**, *Research Engineer Intern, mentored by Dr. Gregory Neven*
Present
- Designing zero-knowledge proof approaches for privacy-preserving, verifiable computation.
 - Investigating privacy trade-offs in cryptographic protocol design for blockchain applications.
- Jun. 2025 – **Cysic, Inc.**, *Research Engineer Intern, mentored by Dr. Xiong (Leo) Fan*
Apr. 2026
- Developed **SUMMER**, an end-to-end Zero-Knowledge Proof of Training (zkPoT) system for RNNs that achieved 8.5x performance improvement over baselines.
 - Explored and prototyped next-generation zero-knowledge primitives for Large Language Models (LLMs) and other advanced cryptographic methods.
- Jun. 2024 – **Cysic, Inc.**, *Research Engineer Intern, mentored by Dr. Xiong (Leo) Fan*
Aug. 2024
- Conducted research and development focused on Halo2 and Plonky2 for cryptographic primitives in decentralized applications.
 - Designed and optimized zk-SNARK protocols to improve proof generation and verification efficiency in zero-knowledge proof systems.
 - Tested, analyzed, and applied open-source libraries, including SP1, RISC ZERO, Intmax2, EZKL, and Expander for zero-knowledge solutions.

- Aug. 2020 – **SenseTime, Senior Solutions Manager**, Shenzhen, China
- Aug. 2022
- Designed tailored solutions and recommended process improvements to meet current and future business needs.
 - Assessed customers' strategic needs and discovered key business requirements to recommend the company's products, solutions, and services, articulating their advantages and business value.
 - Collaborated with product teams locally and overseas to understand available products and propose solutions best suited to client needs.
 - Provided timely, prioritized, and complete customer-based feedback to Product Management, Research, Sales, Engineering and/or Support regarding client's business cases, requirements and issues.
- Aug. 2016 – **Huawei Technologies Co., Ltd., Android Development Engineer**, Shenzhen, China
- Jul. 2019
- Developed core modules for Huawei AppGallery, achieving over one trillion app interactions.
 - Implemented Android Client of Huawei AppGallery Essential Apps, used by more than 160 million users monthly, ensuring robust performance and reliability.
 - Built and maintained multi-language support for applications deployed in 163 countries.
 - Collaborated with cross-functional teams to optimize the performance and deployment of distributed applications.
 - Integrated backend APIs with global cloud services to ensure scalability and secure data management.
- Apr. 2017 – **Huawei Technologies Co., Ltd., VR Development Engineer**, Shenzhen, China
- Dec. 2017
- Led a team of seven in designing and implementing Huawei VRStore Client, integrating 3D user interface components.
 - Enhanced system performance through optimization of VR data streaming on cloud infrastructures, improving data throughput and latency.
 - Conducted extensive testing and validation for cross-platform compatibility, ensuring seamless user experience.
- Jul. 2015 – **Huawei Technologies Co., Ltd., Software Engineer Intern**, Shenzhen, China
- Sept. 2015
- Maintained and optimized the Huawei AppGallery Android client, debugging and deploying updates to enhance performance and stability.
 - Collaborated with senior engineers to implement improvements for multi-region deployment, enhancing application reach and usability.

AWARDS & CERTIFICATES

2012–2013 **University Fellowship**, Sun Yat-sen University

TEACHING EXPERIENCE

- Spring 2026 **Teaching Assistant**, CS442: *Introduction to Cryptography*, Rutgers University
- Fall 2025 **Teaching Assistant**, CS344: *Design and Analysis of Computer Algorithms*, Rutgers University
- Fall 2024 **Teaching Assistant**, CS512: *Introduction to Data Structures and Algorithms*, Rutgers University
- Spring 2024 **Teaching Assistant**, CS419: *Computer Security*, Rutgers University
- Fall 2023 **Teaching Assistant**, CS206: *Introduction to Discrete Structures II*, Rutgers University
- Spring 2015 **Teaching Assistant**, *Communication Theory*, Sun Yat-sen University

ACADEMIC SERVICE

External
Reviewer

FC'24, Crypto'25, IEEE S&P'26, Crypto'26

PROGRAMMING LANGUAGES

Java, Python, C++, C, Rust