




# Zichen Zhang

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## Education

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- **New York University** Sep 2024–Jun 2029 (expected)  
*Ph.D. in Computer Science* Manhattan, New York, New York, United States  
– GPA: 4.000/4.000
- **University of Science and Technology of China** Sep 2020–Jul 2024  
*B.E. in Computer Science and Technology* Shushan, Hefei, Anhui, China  
– GPA: 4.06/4.30  
– **Thesis:** Coq Mechanized Formalization and Verification of Realistic SQL Query Optimization Rules

## Preprints

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- **Building Extensible Program Logics through Effect Handlers** Nov 18, 2025  
Zichen Zhang, Simon Oddershede Gregersen, and Joseph Tassarotti

## Publications

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- **Completeness of Iris-Based Program Logics** Aug 25, 2026  
Johannes Hostert\*, Zichen Zhang\*, Puming Liu, Simon Oddershede Gregersen, Ralf Jung, and Joseph Tassarotti  
*Proc. ACM Program. Lang.* 10, ICFP, Article 284, 36 pages. doi:10.1145/3828682

## Talks

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- **Completeness of Iris-Based Program Logics** Jun 10, 2026  
*The Sixth Edition of the Iris Workshop* Klosterneuburg, Tulln, Lower Austria, Austria
- **Building Extensible Program Logics with Effect Handlers** Oct 3, 2025  
*2025 New England Systems Verification Day* Cambridge, Middlesex, Massachusetts, United States
- **A Coq Mechanized Formalization of Realistic SQL Query Optimization Rules** May 25, 2024  
*The Third Summit for Students in Hua Xia Talent Program of Computer Science and Technology* Jin'an, Lu'an, Anhui, China
- **TranGo: Transparent Hybrid Go Bindings Generation for C Libraries** Jun 3, 2023  
*The Forth Summit for Students in Talent Programs of "Fundamental Subjects"* Baohe, Hefei, Anhui, China
- **TranGo: Transparent Hybrid Go Bindings Generation for C Libraries** May 28, 2023  
*The Second Summit for Students in Hua Xia Talent Program of Computer Science and Technology* Shushan, Hefei, Anhui, China

## Unpublished Research Projects

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- **VeriEQL: Bounded Equivalence Verification for Complex SQL Queries with Integrity Constraints (Extension)** May 2023–Aug 2023  
with Bole Li and Xinyu Wang MIPL @ UMich  
– Extend the state-of-the-art bounded SQL query verifier VERIEQL.  
– Model SQL query and integrity constraint in SMT with integer theory.  
– Add support for window functions and nested correlated queries.  
– Identify and fix bugs of VERIEQL on query execution order.  
– Increment overall support ratio to 82.3% from 46.1%; decrement spurious counterexample ratio to 6.28% from 38.9%.
- **TranGo: Step towards Automated Generation of Transparent Hybrid Go Bindings for C Libraries** Aug 2022–Jun 2024  
with Boyao Ding and Yu Zhang S4Plus @ USTC  
– Semi-automated Go binding generation for C.  
– A generated binding combines CGO calls to the C library and code extracted from existing Go packages, and transparently replaces an existing Go package.

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\*Joint first authors.

– 1.97× geomean speedup compared to original pure Go implementation.

## Honors and Awards

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- **Outstanding Graduation Student** of Anhui Province (58 out of 1889 graduating bachelor's students) May 1, 2024
- **National Scholarship** of China (top-3 students of each school each grade) Dec 31, 2021

## On Campus Working Experience

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- **New York University** Jan 2026–May 2026  
*Recitation Leader & Grader @ CSCI-GA2110 (Programming Languages)* Manhattan, New York, New York, United States
- **University of Michigan** Jul 2023–Dec 2023  
*Assistant in Research* Ann Arbor, Washtenaw, Michigan, United States
- **University of Science and Technology of China** Aug 2022–Mar 2023  
*Teaching Assistant @ 011151 (Analog and Digital Circuits)* Shushan, Hefei, Anhui, China