Vincent Chan

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Education

University at Buffalo, Buffalo, NY, *PhD in Computer Science* Jan 2025 - Present

- **Research Interests:** Programming Languages, Type Systems, Functional Programming, Verification, Compiler

University at Buffalo, Buffalo, NY, *BS in Computer Science* Sep 2023 - Dec 2024

- **Coursework:** Operating Systems, Distributed System, Algorithms, Software Engineering

Erie Community College, Buffalo, NY, *AS in Computer Science* Jan 2022 - Jun 2023

- **Coursework:** Data Structures, Computer Architecture, Linux

Experience

Teaching Assistant, University at Buffalo – Buffalo, NY Jan 2024 - Present

- CSE 305: Introduction to Programming Languages
- Tool: OCaml
- Lead weekly recitation for students, and held office hours
- CSE 331: Algorithms and Complexity
- Tools: C++, Python
- Design course materials
- Lead weekly recitation for students, and held office hours
- Lead Grading assignments and exams

Projects

Pirouette Compiler Pirouette Compiler

- Compiler and tool chain for Pirouette Language
- Compile a centralized functional program via endpoint projection into programs for each node in a distributed system
- Tools Used: Dune, OCaml, Graphviz

Redis-rs redis_rs

- Implementation of Redis in Rust
- Use crate tracing for journaling and logging
- Use crate tokio for asynchronous I/O
- Tools Used: Rust

Kademlia

- Implementation of Kademlia in Go
- Distributed Hash Table (DHT) for decentralized peer-to-peer computer networks
- Tools Used: Go

Pintos: Operating System

- A UNIX-style mini OS with a scheduler, file system, and virtual memory management
- Tools Used: C, GDB, Docker

Additional Experience And Awards

Follett Textbook Scholarship Erie Community College

Professor William Major Byers Endowed Scholarship Erie Community College

Mary A. Osborne Trust Fund University at Buffalo

Technologies

Languages: C++, C, Go, Rust, Python, OCaml, Haskell, Agda, LaTeX