Ethan Zhang

650-380-4671 | ethanz4@illinois.edu | edzdez.github.io | github.com/edzdez | linkedin.com/in/edzdez

EDUCATION

University of Illinois Urbana-Champaign

Champaign, IL

Bachelor of Science, Mathematics & Computer Science, GPA: 4.0/4.0

May 2027

Related Coursework: Intro to Algorithms & Models of Computation; Data Structures; Systems Programming; Abstract Linear Algebra; Probability Theory; Topics in Automated Deduction.

SKILLS

Languages: C++, Rust, C#, Typescript, Go, Haskell, OCaml

Tools: Linux, Bash, Git, Vim, CMake, GNU Make, LATEX

Technologies: ASP.NET Core, Hapi, Qt, Gtk, React, Svelte, Jest, Cypress

EXPERIENCE

John Deere Urbandale, IA

Software Engineering (IT) Intern

May 2024 - August 2024

- Developed machine & device compatibility flows for a Node.js microservice in the license management system, implementing logic for selecting features and delivery methods based on device specifications.
- Maintained and built features for the license purchase & assignment flows in a full-stack React application.
- Collaborated with Deere's Okta team and Zuora support to enable Single Sign-On (SSO) and user/group provisioning, streamlining access management for the licensing and sales teams.
- Followed the Scrum framework, participating in daily stand-ups, backlog refinement, sprint retrospectives, and sprint reviews.

University of Illinois Urbana-Champaign

Champaign, IL

Course Assistant

January 2024 - Present

- Course assistant for CS 173: Discrete Structures.
- Graded honors homework assignments and fixed bugs in the Haskell autograder.
- Wrote problems for the Spring 2024 final exam.
- Assisted students with problem sets during weekly tutorial sections and office hours.

PROJECTS

sway-easyfocus

- Designed a command-line tool in Rust for efficient window focusing in the Sway window manager, communicating with Sway through an IPC socket and rendering window hints via gtk-layer-shell.
- Achieved recognition with 16 stars on GitHub, over 3,900 downloads on crates.io, and inclusion in the Nix package repository.

power-profiles-applet

- Developed a Gtk-based systray applet in Rust to manage power profiles on Linux.
- Interfaced with the freedesktop project's power-profiles-daemon, a power management solution that is preinstalled on many Linux distributions.

scheme-ish

- Collaborated with a partner to develop an interpreter for a programming language inspired by Scheme in Rust with minimal dependencies.
- Implemented core language features, including arithmetic, variables, conditionals, and closures.