Einar Strandberg

Skills

Web Development
- Javascript, HTML, CSS
- Vue & React web framework
- Node.js server environment
- Haskell servant framework

- Basic SQL
- iOS Mobile Development with Swift
- Git source control
- C++, Python, JavaScript, Swift, Java, Haskell, Rust

Experience

TNHIMSS Hackathon: Collegiate Division Winner (Oct 3-Nov 15, 2023)
- Team lead; react frontend and python backend.

Vandyhacks X Hackathon: Eldercare Category Winner (October 28-29, 2023)

Save-a-Lot Grocery Store Stocker and Cashier (June 2022-June 2023)

MTSU Mobile App Development Team: Student Developer (January 2019-September 2020)
- Helped transition to an MVVM model using the reactive programming library RxSwift.
- Wrote network request utilities for interacting with the backend API using RxSwift.
- Implemented offline data caching to allow functionality without network access.
- Used feature branch workflow with gitlab merge requests.
- Built features including class schedule and searchable on-campus map.
- Selected testing framework, wrote test utilities including a local server for mocking api responses, and feature tests.

HCA Healthcare: Intern (Energy Services Facility Maintenance; Manager Emma Briggs) June-July 2018
- Identified the need for, and implemented, scripts using VBA and JavaScript to automate time-consuming manual data collection by directly querying REST APIs and collecting the information into CSV files.

Vandyhacks V Hackathon: Microstrategy Category Winner (November 2-4, 2018)

Education

Graduated from Oakland High School (2014-2018)
Incomplete B.S. Major in Computer Science
  Middle Tennessee State University (2018-2021, 2023-Current)

Projects

- Undergraduate research under Dr. Zhijiang Dong at MTSU focused on creating a clang plugin to inject code to verify runtime program behavior.
- Designed and implemented an IoT-based control system for a small robotic arm.
- Wrote a web-app to allow to digitize, store, and search a recipe collection. Frontend written in Vue, backend written in Haskell.
- Extended the "mypy" python type checker to implement refinement types.