

David Wen Riccardi-Zhu

(347) 560-3979 · dwrz@dwrz.net · code.dwrz.net · github.com/dwrz · github.com/dwrz-dbhg

SKILLS

AWS, bash, Containers, CSS, Go, git, HTML, JavaScript, MongoDB, PostgreSQL, REST APIs, Schema and System Design
C, Emacs Lisp, Linux, Networking, OpenBSD, Python, System Administration

EXPERIENCE

Founding Engineer — [Museum Exchange](#)

November 2023 – Present

- As sole engineer, took over aging Go and React based MVP and built a new and expanded implementation in Go.
 - Built donation management system featuring object listing, catalogue viewing, and proposal and donation workflows.
 - Developed comprehensive admin portal including donation kanban board, reporting systems, and metrics dashboards.
 - Implemented asynchronous worker infrastructure for bulk uploads, metrics, report generation, and notifications.
 - Integrated Dropbox Sign for digital agreements.
- Architected new database schema, migrated data, and refactored queries to utilize MongoDB aggregations.
- Implemented responsive frontend components and templates with Bootstrap and custom CSS.
- Managed AWS infrastructure and deployment of services.
- Mentored interns on backend and frontend development and best practices; conducted code review on their PRs.

Founder — [Chimerical LLC](#)

March 2023 – Present

- Iterating on an E-commerce platform written in Go and PostgreSQL; focus on progressive enhancement and rapid order placement.

Senior Site Reliability Engineer — [Wish](#)

April 2023 – November 2023

- Led incident response as both analyst and coordinator during on-call rotations.
- Identified and resolved site performance and security issues.
- Created weekly site status report generator (Go, incident.io API) and added support for DORA and other SRE metrics.

Vice-President of Engineering — [Daybreak Health](#)

January 2022 – October 2022

- Architected and built Daybreak Health API, utilized by its cross-platform React Native app.
- Stood up backend development environment, including build scripts, service configuration, and containerization.
- Developed database schema, migrations, queries, and Go packages for database models.
- Integrated backend with AWS, Salesforce, Slack, Twilio, and Health Gorilla APIs.
- Documented API and backend development setup for onboarding engineers.
- Mentored and trained junior engineers and interns.
- Conducted code review and maintained the backend monorepo.

Vice-President of Engineering — [Good Uncle](#) (acquired by [Aramark](#), May 2019)

January 2018 – January 2022

- Built backend services, enabling simultaneous cooking and delivery of orders from proprietary vans.
 - ~400K orders and \$5M in revenue as of August 2021, with an average delivery time of 25 minutes.
- Rearchitected infrastructure to obtain cost reductions of 99% for AWS, 69% for MongoDB, and 85% for CI/CD.
- Built control panel web app, utilized by delivery drivers, operations, marketing, and customer support.
- Managed development and release of cross-platform React Native app; contributed refactors and bug fixes.
- Consolidated the engineering team to two engineers, reducing the largest engineering expenditure.
- Built an inventory prediction engine used by the culinary team to estimate the number of meals to prepare.
- Integrated backend with university payment systems, including: Atrium, CBORD, and Transact.
- Designed and developed a mealplan subscription system in three months, collecting over \$500K in revenue.
- Created command-line tools to assist the engineering team, including an orders generator to simulate load.
- Found and fixed mission critical application and infrastructure issues while under the pressure of live delivery operations.
- Integrated APIs, including: AWS, Big Query, Google Maps, Intercom, Samsara, Slack, Stripe, and Twilio.

PERSONAL PROJECTS

Self-hosted [personal website](#) (LetsEncrypt, Debian, Go) ♦ [Text editor](#) (Go) ♦ [Self-hosted security cameras with object detection](#) (motion, bash, Raspberry Pi, AWS Rekognition, yolov7) ♦ Self-hosted LLM server (llama.cpp, nginx, Debian) ♦ OpenBSD Router (dhcpd, pf, unbound) ♦ FizzBuzz (x86 Assembly) ♦ [Terminal game](#) (Go) ♦ [HTML canvas game](#) (JavaScript) ♦ [Free memory system call in xv6](#) ♦ [Diet Quality Score Calculator](#) (Go)

EDUCATION

Winter 1 2022 Batch, [Recurse Center](#)

February 2023

Advanced Software Engineering Immersive, [Hack Reactor](#)

January 2018

Juris Doctor, [St. John's University School of Law](#) (Bar Admission, NY 2015)

May 2014

Bachelor of Arts (Philosophy and Italian Studies), [Wesleyan University](#)

May 2009