Sidney Bernardin

Backend Software Developer

Chantilly, VA | sidney.bernardin@gmail.com | (813) 461-3785

linkedin.com/in/sidney-bernardin-04755b374 | github.com/Sidney-Bernardin | sidney-bernardin.github.io

TECHNICAL SKILLS

- **Programming Languages:** Golang, JavaScript, Python, HTML, CSS
- **Frameworks/Libraries:** HTMX, Templ, Vue.js, express.js
- **Tools:** PostgreSQL, MySQL, Redis, MongoDB, NATs, Nginx, Docker, Git, GitHub, Google Cloud Platform, Linux

PROJECTS

Go Live Streaming Platform | github.com/Sidney-Bernardin/Go-Live   **2022 - 2023**

Technologies: Golang, JavaScript, Vue.js, MongoDB, Redis, Nginx, Docker, Microservices, GRPC, HLS/TLS

- Designed an **RTMP/HLS** based **live video streaming** pipeline using **Nginx** and an advanced **Vue.js** UI, resulting in a smooth and performant user experience.
- Applied **hexagonal domain-driven** design to **Golang microservices**, resulting in a **scalable** and **clean** code base.
- Crafted a **distributed system** using stateless **microservices** that communicate through **GRPC** and **Pub/Sub** protocols, resulting in a **horizontally scalable** infrastructure.
- Implemented chat rooms powered by **Redis Pub/Sub, Golang concurrency,** and **WebSockets**, allowing for **real-time** user interactivity**.**

Urithiru Load Balancer | github.com/Sidney-Bernardin/Urithiru   **2024 - 2025**

Technologies: Golang, TCP, Docker

- Engineered a **layer-4 TCP** based **load-balancer** using **Golang's** powerful **concurrency** features to allow for multiple **reverse-proxies** to be configured using **TOML** files.
- **Optimized memory** usage by adjusting **buffer sizes** per connection with the help of a **PPROF** server for **performance metrics**, allowing for a **10x** reduction in **memory** usage and more **connections per proxy**.
- Created multi-stage **Dockerfiles** that support multiple **CPU architectures**, allowing for an extremely portable and **prediction-ready** application.

NFL Discord Bot | github.com/Sidney-Bernardin/NFL-Discord-Bot   **2023**

Technologies: Python, Web Scraping, Docker

- Programmed a **webhook** based **Discord** bot that uses a custom **web-scraping** pipeline for nfl.com using **Python**, which retrieves specific stats per NFL player for each year of their career.
- Created **end-to-end tests** that run with **GitHub Actions** for the **web-scraping** pipeline using snapshots from nfl.com as test data, creating an **efficient CI/CD pipeline**.
- Implemented an advanced **logging system** and configured multi-target **Dockerfiles**, resulting in a robust and **production-ready** runtime.

CERTIFICATIONS

CODECADEMY - BACK-END ENGINEER CAREER PATH   **August 7, 2025**

Professional Certification: codecademy.com/profiles/Sidney123456/certificates/810f53d14de24b938cc13c7c2af1e686