JARETH GOMES

Backend Software Engineer

Chicago, IL   jarethgomes@gmail.com   (847) 957-4007

https://linkedin/in/jarethgomes   https://nyda.dev   https://github.com/Nydauron

EDUCATION

University of Illinois: Urbana-Champaign   Aug 2019 – May 2023

B.S. in Computer Science   GPA: 3.9

Relevant courses: Computer Security II, Computer Security I, Cryptography, Distributed Systems, Audio Computing Lab, Game Development

TECH STACK

LANGUAGES Rust, Go, C++, Python, TypeScript, Bash, Lua, Java, SQL, HTML, CSS, Solidity

TECHNOLOGIES Linux, MongoDB, WebAssembly, Embedded, Next.js, PostgreSQL, MySQL, AWS, React, Express.js, LaTeX, Flask, Ansible

TOOLS Git, Docker, Neovim, tmux, GDB, CMake, Nmap, Wireshark, Delve

CERTIFICATIONS

CompTIA Pentest+   Nov 2024

EXPERIENCE

HümEIQ   Jun 2023 – Current

Full Stack Engineer   Schaumburg, IL

- Rapidly developed a customizable course hosting platform using TypeScript, Next.js 14, tRPC, PostgreSQL, DrizzleORM, and server actions within 10 weeks, enabling the company to develop asynchronous online course materials
- Optimizes server performance by using static content generation wherever possible
- Conducts weekly meetings with the CEO on any new features added and for QA feedback, ensuring a great user experience when creating new course content and taking courses
- Maintains production deployments, infrastructure, and course material using Vercel, NeonDB, AWS S3, and Wistia

University of Illinois: Urbana-Champaign   Aug 2022 – May 2023

Lead Course Assistant   Urbana, IL

- Spearheaded and led the Spimbot C++ development team of approximately 6 teaching and course assistants, which oversees the semesterly Spimbot lab and tournament (see Prof. Geoffrey Herman's recommendation on LinkedIn)
- Adapted quickly to working in the large codebase within the first few weeks of joining the Spimbot team
- Employed technical skills in C++17, Git, Docker, Qt, WebAssembly, Python, and Bash to develop course materials
- Maintained regular communication with the professor, updating on the Spimbot team's progress and any technical problems and solutions

HackIllinois   Sep 2022 – Mar 2023

API Lead   Urbana, IL

- Led a team of 2 developers in the enhancement and maintenance of the open-sourced, well-tested HackIllinois microservice API, using Go to implement new features and optimize performance
- Implemented robust deployment strategies utilizing Docker Hub, GitHub CI Actions, and AWS ECS, ensuring seamless production deployment and scalability for each service
- Engineered a comprehensive metrics system leveraging Prometheus and Grafana, enabling real-time service-wide monitoring and providing valuable insights into API performance

PROJECTS

Photogate Timing Device   Jun 2024 – Current

https://github.com/Nydauron/photogate

- Designing and constructing a laser photogate timing device for Science Olympiad events using an ESP32C3 microchip and embedded no_std Rust
- Enables use of concurrency using interrupts and security with an encrypted message protocol