quartzic.co
github.com/quartzic

Nathan Goller-Deitsch

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Education

Clemson University   **Fall 2022 – Expected Grad. Spring 2026**
Computer Science (B.S). Member of the Honors College.

Work Experience

Summer Analyst   **Summer 2023**
Arenova Capital
- Led development of an internal VFX bidding tool to support portfolio companies (JavaScript, Next).
- Performed data extraction and analysis for internal thesis exploration and deal exploration (Python).

Software Engineer, Intern   **Summer 2022**
Expeditors International
- Led development of two major internal applications over the course of three months (JavaScript, React).
- Implemented virtualization, error monitoring, and application analytics (Proxmox, Sentry, PostHog).

Software Engineer, Consultant   **Summer 2022**
ISA Engineering
- Created an ETL solution to move solar energy production data into a time-series database (Python, InfluxDB).
- Created a custom report generation tool solution for carbon savings (Python, Jinja, Amazon SES).
- Set up and maintained Grafana dashboards for overall monitoring and reporting.

Languages and Technologies

- **Languages:** JavaScript, HTML, CSS, Python, C++
- **Libraries:** React, React Native, Next, Tailwind CSS, Pandas, Matplotlib, OpenCV, Catch2, Boost
- **Platforms:** Windows, macOS, Unix, Cloud (Google, AWS), BaaS (Firebase, Supabase)

Selected Projects

Iridium: Bidding engine for visual effects companies.   **2023**
- Created a Next.JS application utilizing Supabase and Vercel to manage VFX project bids, with a focus on multi-version support, ingest and export tooling, and a polished interface.

Uplink: RFID-based educational attendance tracking solution.   **2022**
- Utilized existing student identity cards in conjunction with an Arduino-based sensor module, Firestore database, and React-based web dashboard to create attendance reports for teachers and administrators.

Kaironetic: Open-source programming interface for KUKA Robotics applications.   **2021**
- Created a C++ library that allowed rapid creation of KUKA Robotics Language software, including abstractions for common tasks such as drawing on paper or playing a piano.

Selected Side Projects & Awards

Drive Duels: Turn-based battle game played with physical disks.   **2023**
- Won **Most Curious Use of USB** at PennApps XXIV. Utilized JavaScript, React, Electron, and OpenAI.

Planwise: Task management app with AI superpowers.   **2023**
- Won **Best Use of Data/API** at CUhackit. Utilized JavaScript, React, Supabase, and OpenAI.

Discord Wrapped: Analysis tool for large-scale chat history exports.   **2022**
- Won **First Place** out of over 80 projects at HackMIT Blueprint. Utilized JavaScript, React, and Plotly.