

(703) 350-1798  
Harrisonburg, Virginia  
adamvinch@protonmail.com

# Adam Vinch

GitHub: Adamv27  
linkedin.com/in/adam-vinch

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## EDUCATION

**James Madison University**  
*Computer Science (B.S)*

- Major GPA: 3.8/4.0

**Harrisonburg, Virginia**  
*Expected Graduation May 2025*

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## WORK EXPERIENCE

**Software Engineer Intern**  
*Federated Auto Parts*

**June — August 2024**  
*Staunton, Virginia*

- Designed and built an API logging **Flutter** application, significantly reducing both development hours needed to connect members to our API and missed transactions due to errors in various stages of the order process.
- Implemented **Quart** endpoints into the main API to save **MongoDB** queries for stored HTTP logs. Queries are automatically generated while interacting with various filters in the **Flutter** application.
- Rewrote core B2B software, used daily by thousands of salespeople, from .NET to a cross-platform, responsive **Flutter** application.
- Effectively communicated the strengths and limitations of the **Flutter** framework to upper management and design team, to reach development goals in half the expected time.

**Student Research Assistant**  
*James Madison University*

**January — May 2024**  
*Harrisonburg, Virginia*

- Assisted Dr. Michael Stewart with his research project, significantly improving UX, by optimizing **React** code to minimize unnecessary re-renders.
- Added **Django** API endpoints to move business logic out of the front-end, improving loading times.
- Met with research team to analyze user feedback and plan out development goals.

**Software Engineer Intern**  
*Federated Auto Parts*

**June — August 2023**  
*Staunton, Virginia*

- Developed a high-performance **Python** API serving as a middleware solution for a federated system of autonomous members allowing them to easily integrate their existing software to access warehouse data by using the **Quart** web microframework.
- Built integration test suite that allows for code-minimal, low-overhead extensibility by downloading logged requests from the admin interface and adding them to a directory that automatically generates tests.
- Increased the total size of the test suite which run in the CI pipeline by 55x through the use of **pytest** to generate integration and unit tests.

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## PROJECTS

**Flavorful**

**October 2023**

*JavaScript, FastAPI, Postgres, Docker*

- Built a full stack application designed to help people find recipes that fit their dietary restrictions, budget, and time constraints.
- Utilized **GitHub Actions** and **GCP** to save development hours by automatically publishing **Docker Image** to Artifact Registry and running the container on Cloud Run.
- Created **FastAPI** backend allowing users to save and upload recipes by storing data in a **Postgres** database hosted by Supabase.

**AquaLog**

**July 2023**

*TypeScript, React, Express, Postgres*

- Created a full-stack web app which provides aquarium hobbyists with a way to log various parameters of their aquariums overtime and estimates when they are properly established and safe for fish to be added.
- Built **Express** API with **TypeScript** to estimate the current stage in the nitrogen cycle, store and retrieve data from a **Postgres** database, and display it using a **React** frontend.
- Added user auth to allow access to user specific aquarium data through the use of **JWT** and **OAuth2**.

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## SKILLS

**Languages:** Dart, Python, JavaScript, TypeScript, HTML, CSS, C, Java, Ruby  
**Frameworks:** Flutter, Flask, FastAPI, React.js, Express, Node.js  
**Technologies:** Git, Linux, MongoDB, PostgreSQL, Docker, GCP