Layla Aure

SUMMARY:

Computer Science graduate with experience building full-stack applications, APIs, AI-integrated tools, and developer-focused software. Strong foundation in software engineering, systems, algorithms, and scalable application development. Passionate about building practical solutions through hands-on engineering and collaborative development.

TECHNICAL SKILLS:

Programming Languages: Python, Java, C, C++, C#, JavaScript, SQL, Ruby, Haskell, Rust, HTML/CSS
Web & Frameworks: React, Vue.js, Node.js, Express.js, Flask, REST APIs, Vite
Tools & Technologies: Git, GitHub, GitHub Actions, Subversion, Jira, Linux, Bash, PostgreSQL, MySQL Workbench, Nginx, PM2, Google Sheets API, PyInstaller
Technical Concepts: Full-Stack Development, API Integration, Client–Server Architecture, Agile Development, Scrum, Accessibility (WCAG), AI-Assisted Development
Certifications: CIW Site Development Associate | IBM AI Certifications (6x)

EDUCATION:

James Madison University **May 2026**
Bachelor of Science – Computer Science
GPA: 3.622 | President's List (Spring 2026) | Dean's List (All Semesters)
Relevant Coursework: Algorithms & Data Structures, Discrete Structures, Computer Systems, Software Engineering, Database Systems, Applied Algorithms, Virtual Reality Applications, Programming Languages, Operating Systems, Web Development

EXPERIENCE:

App Developer, JMU Pep Band **Sep 2025 - Present**
- Engineered a cross-platform attendance tracking system in Python used by 250+ members across 70+ events, significantly reducing attendance processing time
- Integrated Google Sheets API to validate student IDs, categorize attendance records, and automate report generation workflows
- Packaged and distributed executables for macOS and Windows using PyInstaller
- Applied Agile/Scrum methodologies in Jira to manage sprint planning, task tracking, and project deliverables

Advanced App Development, JMU **Jan 2026 - May 2026**
- Conducted faculty-supervised independent study in software application development
- Designed and implemented Python applications with emphasis on APIs, client-server systems, and data persistence
- Explored software architecture, UI/UX design, and modern development workflows through hands-on projects

VEX Robotics Mentor, Enginotic 6 Robotics **May 2019 - May 2022**
- Guided teams in mechanical design, programming, problem-solving, competition strategy, and time management
- Mentored teams that qualified for State and World Championships

PROJECTS:

Splatbot Game - *Coding Outreach* **Mar 2026 - Present**

- Developed a browser-based competitive coding game to make programming accessible for JMU CS students
- Engineered a JavaScript game engine with SVG rendering and sandboxed in-browser Python bot execution using Pyodide and Web Workers to securely isolate user-submitted code
- Designed core gameplay systems, bot APIs, UI components, and persistent client-side settings
- Organized and hosted the inaugural Splatbot tournament fundraiser, attracting 30+ participants, 50+ attendees, and 60+ live matches
- Used Git and Jira for version control, sprint planning, feature tracking, and collaborative development workflows

Jarvis AI Home Network - *Hackathon Project* **Apr 2026**

- Built a voice-driven AI assistant integrating calendar, Spotify, and smart-home systems
- Developed a Node.js/Express backend with REST APIs for scheduling, chat history, and device control
- Created a React frontend with a dedicated AI interface and dynamic system prompt handling
- Integrated Google Calendar API and Home Assistant webhooks to enable real-world automation
- Implemented LLM tool-calling workflows to orchestrate multi-service actions

Social Network Platform for Spanish Speakers - *Full Stack App* **Jan 2026 - May 2026**

- Designed and implemented RESTful APIs using Node.js and Express.js
- Developed relational database schemas with migration and seed scripts for structured data management
- Deployed and maintained a production backend on a Linux DigitalOcean Droplet using Nginx and PM2, with secure environment variables and credential management

Terminal-Based Spreadsheet - *Ruby Program* **Jan 2025 - May 2025**

- Built a terminal-based spreadsheet application in Ruby with custom parsing and a formula evaluation engine
- Implemented lexer/parser for expression handling and interactive grid editing using Curses

Teaching Assistant Database - *Web App* **Aug 2024 - Dec 2024**

- Designed a MySQL database schema and built a Flask-based CRUD web interface for managing TA records
- Improved data accessibility through structured UI and backend integration

INVOLVEMENT:

CS Faculty Search Committee, JMU **Sep 2025 - May 2026**

Student Representative

- Participated in candidate evaluation and interview process

Competitive Programming Club, JMU **Aug 2024 - May 2026**

Social Chair: Aug 2025 - May 2026

- Organized technical events and increased member engagement
- Solved algorithmic problems on platforms like Kattis

Hobbies/Interests - JMU Bands | Madison Motorsports | Marvel Rivals | Minecraft