






Brian James

 [Portfolio Website](#) |  Sacramento, CA |  707.293.5706 |  brianjames.dev@gmail.com |  [Github](#)

Skills

- **Languages & Tools:** Python | C++ | Java | JavaScript | Git | Unit Testing | OOP
- **Web/Software:** AWS | React | Node.js | Express.js | Flask | SQLite | MongoDB | Tkinter | HTML/CSS
- **Data Science & ML:** Pandas | NumPy | Matplotlib | Scikit-Learn | Seaborn | Power BI | SQL
- **Areas:** Full-Stack | Frontend | Backend | Data Science | Microservices | Cybersecurity

Education

Bachelors of Science Computer Science – Oregon State University

Expected: **December 2025 | GPA 3.8**

- Relevant Coursework - Applied AI and Deep Learning, Applied Machine Learning, Applied Data Science, Data Structures & Algorithms, Computer Networks, Operating Systems, Cloud Application Development, Mobile Software Dev, Open Source Software.
- **AWS Certified Solutions Architect Associate Certification SAA-C03 (In-Progress)**

Projects

BookieBot

Autonomous AI Finance Agent

Solo Project

05/2025 - 06/2025

- Designed and implemented an autonomous agentic AI finance chatbot that enables users to log, query, and visualize monthly expenses using natural-language commands.
- Developed 30+ intents for analytics (spending breakdowns, projections, no-spend streaks), with multi-user, role-based workflows.
- Tech stack: **Python, Discord.py, OpenAI API, Google Sheets API, Railway, AsyncIO, Matplotlib**

Portfolio Website

Serverless Portfolio Website

Solo Project

06/2024 - 07/2024

- Built my serverless portfolio website via AWS S3, CloudFront, Lambda & SES for fast delivery, secure forms, and email alerts.
- Designed a responsive UI using React, JavaScript, and custom CSS, emphasizing clarity, minimalism, and visual consistency.
- Added reCAPTCHA and form validation to block spam and ensure reliable interaction across devices.
- Tech stack: **React, Javascript, CSS, HTML, AWS, S3, CloudFront, AWS Lambda, SES**

SkinPro

Full-Stack Desktop Application

Contractual

02/2025 - 04/2025

- Designed and developed a full-stack desktop application for a day spa, managing 300+ client records and 2,000+ appointments, saving 1,000+ hours/year of manual work and \$3,000+ in software costs.
- Collaborated with the spa owner to define requirements, prioritize features, and refine the app around daily business operations.
- Integrated a QR-based mobile photo upload system and dynamic PDF prescription generator, reducing photo management time by 90% and supporting customizable skincare routines.
- Built modern, responsive UIs with Tkinter and a local SQLite database with weekly backups, saving \$500+ per year on cloud costs.
- Tech stack: **Python, SQLite, Flask, CustomTkinter, ReportLab, PIL**

NES Emulator

Cycle-Accurate Emulator

5-Person Team

09/2024 - 06/2025

- Engineered a cycle-accurate NES emulator, particularly the APU and CPU components, achieving authentic timing, >95% test coverage, and leading a full-scale system refactor resolving 25+ platform-specific bugs across Linux, macOS, and Windows.
- Optimized and validated 40+ unit tests for CPU instruction accuracy, memory reads/writes, and interrupt handling, achieving over 95% instruction test coverage.
- Led development through Trello workspace boards and Discord, ensuring consistent progress tracking, effective task delegation, and streamlined team communication.
- Tech stack: **C++, SDL2, Dear ImGui**

Notable

- **Microsoft PowerToys (Open Source):** Enhanced CommandPalette UI using XAML to improve user clarity and discoverability.
- **Touring Musician/Stage Engineer:** Played lead guitar in the band “Entheos” signed to Metal Blade Records. **12/2021 - 01/2024**
 - Designed and programmed an automated live sound & lighting system (70+ fixtures) using Python and Showbuddy, creating 100+ custom lighting scenes synchronized to instruments and vocals, **reducing tour crew costs by \$5,000+.** ([Video-Link](#))
 - Independently engineered and programmed the automated lighting system, coordinating nightly with venue lighting directors and stage crews to ensure seamless integration and flawless execution under time-sensitive circumstances.
- **Touring Musician/Composer:** Played lead guitar in the band “Fallujah” signed to Nuclear Blast Records. **04/2014 - 10/2019**