

# Brian James

 [Portfolio](#) |  Sacramento, CA |  [LinkedIn](#) |  [brianjames.dev@gmail.com](mailto:brianjames.dev@gmail.com) |  [Github](#)

**Summary:** Full-stack software engineer with hands-on experience delivering performant, user-focused apps across frontend, backend, and the cloud. Blends technical depth with years of touring experience coordinating high-stakes systems under pressure. I take full ownership of delivering clean, effective solutions—balancing independent problem solving with consistent, team-oriented collaboration.

## Skills

- **Languages & Databases:** Python | JavaScript | C++ | Java | SQL | MongoDB
- **Frameworks & Web:** React | Node.js | Express.js | Flask | HTML/CSS
- **Cloud & DevOps:** AWS (S3, Lambda, SES, CloudFront) | Railway | Git
- **Data Science & ML:** Pandas | NumPy | Matplotlib | Scikit-Learn | Seaborn | Power BI

## Education

**B.S Computer Science – Oregon State University**

*Expected Graduation:* **Dec 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 an autonomous AI finance assistant for Discord, helping users visualize and manage monthly expenses via natural-language queries—reducing the need for manual budgeting tools.
- 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**

### 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**

### Portfolio Website

**Serverless Portfolio Website** ↗

*Solo Project*

**06/2025 - 07/2025**

- 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**

### 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 access, and interrupts—achieving 95%+ coverage.
- Led development via Trello and Discord, enabling clear progress tracking, task delegation, and team coordination.
- Tech stack: **C++, SDL2, Dear ImGui**

## Additional Experience

- **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**