# **Brian James**

Portfolio | ♥ Sacramento, CA | In LinkedIn | Main 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 | C++ | JavaScript | TypeScript (familiar) | SQL | MongoDB
- Frameworks & Web: React | Node.js | Express.js | Flask | HTML/CSS
- Cloud & DevOps: AWS (S3, Lambda, SES, CloudFront) | Railway | Git | CI/CD
- Data Science & ML: Pandas | NumPy | Matplotlib | Scikit-Learn | Seaborn | Power BI

#### Education

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

• 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.

Expected Graduation: Dec 2025 | GPA: 3.8

5-Person Team: 09/2024 - 06/2025

• AWS Certified Solutions Architect Associate Certification SAA-C03 (In-Progress)

# Experience

# Full-Stack Developer | Apotheca Tech Stack: Python, SQlite, Flask, CTkinter, ReportLab, PIL Remote | Part-time: 02/2025 - Present

- Design, maintain, and evolve the SkinPro desktop application [Github] in collaboration with the business owner, managing 300+ client records and 2,000+ appointments, saving 1,000+ hours/year of manual work and \$3,000+ in software costs.
- Integrated a QR-based mobile-to-desktop photo upload system and a dynamic PDF prescription generator—reducing photo management time by 90% and supporting customizable care routines.
- Built modern, responsive UIs with CTkinter and a local SQLite database with weekly backups, saving \$500+ per year on cloud costs.

# Stage Automation Engineer & Guitarist | Entheos Tech Stack: Python, Showbuddy, Logic Pro X Full-time: 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.

# **Projects**

# BookieBot | Al Agent / Tech stack: Python, Discord.py, OpenAl API, Google Sheets API, Railway Solo Project: 05/2025 - 06/2025

- Designed an autonomous AI finance agent 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.
- Configured a lightweight CI/CD pipeline using GitHub and Railway to automate builds, tests, and deployments for faster iteration.

### Portfolio Website / Tech stack: React, Javascript, CSS, HTML, AWS (S3, CloudFront, Lambda, SES) Solo Project: 06/2025 - 08/2025

- 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.

# NES Cycle-Accurate Emulator ✓ Tech stack: C++, SDL2, Dear ImGUI, Git, Trello

- 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.

# **Additional Experience**

**Open Source Contributor** – **Microsoft PowerToys:** Enhanced UI clarity and discoverability in CommandPalette using XAML and .NET; merged into a project with 120k+ GitHub stars. (view PR)

**Touring Musician/Composer:** Played lead guitar for internationally touring bands signed to major labels; coordinated technical production and logistics across 20+ countries, and wrote multiple full length albums.