Nicholas Lewis

Aspiring Software Engineer · Backend and Game Dev Focus · Sac State CS Graduate

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`LinkedIn` · `Portfolio` · `GitHub`

Core Competencies

Recent CS graduate with strong backend and systems knowledge. Experienced in building multiplayer games, cloud-based tools, and scalable APIs. Passionate about performance optimization, game logic, and clean architecture.

- **Programming:** Java, Python, JavaScript, TypeScript, SQL, C, CUDA
- **Cloud/DevOps:** Google Cloud, Azure, Docker, Firebase
- **Web/API Dev:** React Native, Node.js, RESTful APIs
- **Software Dev:** OOP, Code Review, Game Architecture, Debugging, CI/CD
- **Mobile Dev:** React Native
- **Automation:** Playwright, Git, Linux, Bash, Parallel Computing
- **Methodologies:** Agile, SCRUM, Test-Driven Development (TDD)
- **Soft Skills:** Leadership, Project Management, Problem Solving, Communication

Projects

BigBoom: Multiplayer 3D Tank Game *Core Developer*   Java, OpenGL, UDP, AI Behavior Trees, JBullet
Built from scratch with 1K+ LOC in Java. Implemented a reliable UDP-based client-server protocol, frame-synced quaternion rotations, and behavior tree AI for autonomous turrets. Integrated JBullet physics and server-authoritative state replication. Reduced server sync jitter by 60% using quaternion interpolation and frame-step logic. *GitHub:* `github.com/nickLewisCSUS/BigBoom`

Sac State LIFE Mobile App *Team Lead*   React Native, Azure, Node.js, SQL, REST APIs
Managed a 4-person dev team. Launched a working MVP with 5+ interactive screens, integrated backend API and secure login, and deployed to Azure. Conducted code reviews and supported CI setup.
GitHub: `github.com/Sac-State-Mobile-App-The-Nest/SAC-LIFE`

Cloud PDF Generation and Delivery *Developer*   Node.js, Firebase, Docker
Built a LaTeX-powered PDF generator deployed as a Firebase Function and containerized via Docker. Rendered PDFs from dynamic inputs with support for future scaling. *GitHub:* `bit.ly/3QL1rmw`

Custom CLI Tool (myxargs) *Developer*   C, Linux, Bash
Unix-style xargs clone with support for batching (-n), substitution (-I), and command preview (-t). Built comprehensive edge case handling and performance validation tests. *GitHub:* `github.com/nickLewisCSUS/XARGS`

Experience

Independent Development Projects   *Jan 2023 – Present*

- Engineered and deployed RESTful APIs for 3+ full-stack apps with cloud-hosted backends.
- Debugged and optimized production-ready codebases using OOP principles.
- Integrated Firebase Auth, Azure SQL, and Google Cloud Functions across student-facing apps.

Barista — Target, Lincoln, CA   *Aug 2021 – Present*

- Delivered consistent customer service under fast-paced conditions.
- Trained in multitasking and real-time prioritization handling 50+ transactions per shift.

Education

California State University, Sacramento   *Graduated May 2025*   Bachelor of Science in Computer Science
Relevant Coursework: Operating Systems, GPU Programming, Game Architecture

Sierra College   *Aug 2020 – Dec 2022*   Associate of Science in Computer Science and Natural Science