MASON LIU

Software Engineer/Full-Stack Developer

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SKILLS

- **Languages:** Java ◦ C# ◦ C++ ◦ Python ◦ JavaScript ◦ TypeScript ◦ CSS
- **Frameworks/Tools:** React ◦ Next.js ◦ Node.js ◦ Express ◦ Tailwind CSS ◦ Spring Boot ◦ Vite ◦ Django ◦ Three.js ◦ GSAP ◦ Redis ◦ SQLite ◦ Unity ◦ Git
- **Core:** Full-Stack Development ◦ Data Structures & Algorithms ◦ OOP ◦ Backend Systems

EDUCATION

BACHELOR OF SCIENCE IN COMPUTER SCIENCE　　　　　　　　　　　　　Aug 2025 - May 2028
University of Texas at Dallas　　　　　　　　　　　　　　　　　　　　　　*Richardson, TX*

HIGH SCHOOL DIPLOMA　　　　　　　　　　　　　　　　　　　　　　　　　　May 2025
Lebanon Trail High School, Magna Cum Laude　　　　　　　　　　　　　　　*Frisco, TX*
- AP Computer Science A — 4
- AP Computer Science Principles — 5

PROJECTS

Soundborn (Unity RPG)
(C# ◦ Unity 6 ◦ Game Systems Engineering)　　　　　　　　　　　　　　　　November 2025
- Designed a turn-based battle engine from scratch, optimized to sustain 60 FPS (sub-16ms frame budget, <2ms per battle tick) with speed-based turn order, auto-targeting, status effects, and multi-enemy combat.
- Managed 90+ scripts across combat systems, UI flow, character data, and state management, using clean object-oriented design to support future scalability.

Mase Labs Collective (maselabs.com)
(JavaScript ◦ React ◦ Node.js◦ Express ◦ PostgreSQL ◦ Stripe API ◦ Github API ◦ REST)　December 2025
- 150+ monthly orders processed end-to-end through a high-conversion React storefront, Stripe checkout, and an automated fulfillment pipeline using APIs, hooks, and cron methodology.
- 99.97% fulfillment success with sub-10s median order creation-to-queue time, powered by dual backend architecture (Express + SQLite for local development and Vercel serverless PostgreSQL for production).

JVM Custom Memory Arena
(Java ◦ Low-level Systems Design ◦ Git)　　　　　　　　　　　　　　　　　December 2025
- Published a manual memory allocation Java library that manages and simulates real object lifetimes against JVM's innate tendency to garbage collect under the hood.
- Created all low-level data structures entirely from raw bits/bytes (vector, hash table w/ resizing, stack, queue, linked list ops, arrays, strings) plus 6 primitive serializers; validated with ~45 unit tests and ~5k fuzz operations.

GoFit! (Mobile Fitness App)
(Java ◦ Python ◦ React ◦ Google Maps API ◦ OpenAI API ◦ AI/ML ◦ MySQL ◦ Git)　August 2025
- Developed a cross-platform fitness application that tracks running routes using Google Maps API with real-time GPS integration: Achieved 95% accuracy in route tracking during testing; tested by 15+ peers.
- Implemented automated testing frameworks that reduced bugs by 35%, improving overall product stability.

EMPLOYMENT HISTORY

In-N-Out Burger
Tier III Associate　　　　　　　　　　　　　　　　　　　　　　March 2025 - September 2025
- Promoted twice within 5 months for exceeding performance metrics and demonstrating strong adaptability.
- Balanced 26 hours/week of work while completing full-time CS coursework.
- Trained and onboarded new team members while maintaining accuracy in serving 150+ customers per hour in a high-volume environment.