

Zachary James

Willing to Relocate | US Citizen | GitHub: [zach15james](https://github.com/zach15james) | LinkedIn: [zrjames](https://www.linkedin.com/in/zrjames) | zach15james@pm.me

SUMMARY

Recent dual-degree graduate with published ML research, full-stack SWE experience, hands-on low-level cyber expertise. Seeking software engineering and cyber (reverse engineering) roles where I can contribute from day one.

SKILLS

Summary: Recent dual-degree graduate with published ML research, full-stack SWE experience, hands-on low-level cyber expertise. I enjoy hard problems and am ready to execute day-1.

- Languages: C, C++, Python (scikit-learn, PyTorch, NumPy), Java, JavaScript, PHP, SQL
- ML/DS: Neural nets, regression models, semi-supervised learning, p-Laplacian methods
- Web/Full-stack: React, HTML/CSS, Firebase, Tailwind, REST APIs, CRUD applications, Zapier
- Security: Ghidra, IDA Pro, gdb, Linux, sockets, malware RE, CompTIA Security+

EDUCATION

Louisiana State University

B.S. Computer Science, Minor Psychology

B.S. Mathematics, Honors Minor

Awards: Honors College, Dean's List, President's Honor Roll, S&B Engineers Scholarship, ICPC Competitive Programming team, Startup LSU, CTO LSU's Emerging Technologies Club (25), **CompTIA Security+**

Selected Coursework: Abstract Algebra II, Applied Optimization Theory, Advanced Calculus of Several Variables, Numerical Linear Algebra, OS, Computer Networks, OOP, Malware Analysis, AI, Math Stats, Software Systems

Southern Methodist University

M.S., Computer Science, Cybersecurity

Dallas, TX
Admitted May 2026 (pursuing part-time alongside full-time work)

EXPERIENCE

LSU Department of Mathematics

Undergraduate Research Assistant (Python, scikit-learn, PyTorch, Numpy)

Baton Rouge, LA

May 2024 – March 2026

- Developed ML (traditional regressions, neural nets, and a novel p-Laplacian semi-supervised regression algorithm) to predict body composition metrics; implemented thread pools and custom implementations [\[https://www.frontiersin.org/journals/bioinformatics/articles/10.3389/fbinf.2026.1722578/full\]](https://www.frontiersin.org/journals/bioinformatics/articles/10.3389/fbinf.2026.1722578/full)

Brick Bridge Consulting

Full-Stack Software Engineer (Python, JS, PHP, HTML/CSS, Zapier)

Louisville, KY (Hybrid)

December 2022 – January 2024

- Designed and independently delivered HRM, billing, financial dashboards, and complete workflows for onboarding, automating forms, &c for medical staffing firms
- Built internal analytics and financial tools for client businesses, including invoice generation, rate-card calculators, tax logic, and reporting dashboards for executives to make data-driven decisions
- Developed multi-interface CRUD application for a medical-legal startup, including PHP API integrations, HTML/CSS frontend, and leveled access control (know how to build fast MVPs that scale)

LSU Division of Computer Science & Engineering

Undergraduate Teaching Assistant (Java)

Baton Rouge, LA

December 2022 – May 2024

- TA for 100+ student Java programming labs; grading, proctoring, one-on-one tutoring

PROJECTS

Thymos

- Building a zero-dependency compositional compute runtime for typed tensor graphs that validates, memory-plans, and executes via small backend kernels (C, multithreading, arena allocation, parallelization)

Obedient Jarvis

- Deployed a personal agent network utilizing my Jetson Nano for private local inference for research workloads routed to a repurposed laptop server OpenClaw server (Tailscale, Proton VPN+Mail, llama-server)

Selected Class & Personal Projects

- OpTraxx - task management [\[https://github.com/zach15james/OpTraxx-public\]](https://github.com/zach15james/OpTraxx-public) (React, Firebase, Vite, Tailwind)
- MathDoku - Sudoku-style game build from scratch (C++, CMake, CTest, Raylib)
- Database: rideshare app (sqlite C++ api, MySQL, HTML/CSS)
- Reverse engineering writeups [\[https://resume.agapebloom.com/\]](https://resume.agapebloom.com/), github.com/zach15james/xorpdf
- Active on Hack the Box, Pwn College [\[https://pwn.college/hacker/zach15james\]](https://pwn.college/hacker/zach15james), OpenSecurityTraining2 (OST2), and UVA ICPC-style problems [\[https://uhunt.onlinejudge.org/id/1641288\]](https://uhunt.onlinejudge.org/id/1641288)