

JEREMIAH PITTS

Arlington, TX | 817.264.5290 | jeremiahpitts@gmail.com | LinkedIn: /in/jeremiahpitts | GitHub: xchar08

EDUCATION

The University of Texas at Arlington, Arlington, TX

Aug 2022 – May 2026

- Bachelor of Science in Software Engineering, Bachelor of Science in Physics, Minor in Math
- Awards: Presidential Scholarship, Selected as Software Engineering Department representative for a distinguished luncheon
- Leadership & Involvement: ACM Event Coordinator, Cybersecurity Club Event Coordinator, Workshop Leader, Linux Club Founder

Massachusetts Institute of Technology MITES, Remote

Jun 2021 – Dec 2021

- Engineered a neural network for number recognition, achieving over 97% accuracy, demonstrating advanced proficiency in machine learning and model optimization.
- Authored and presented a research paper, selected as one of the top submissions in a competitive cohort of 20, showcasing thought leadership and academic rigor.

TECHNICAL SKILLS

- Computer Languages: Java, Python, JavaScript, SQL, C, C++
- Tools: Node.js, Express.js, React.js, Puppeteer, PostgreSQL, OpenCV, Firebase, Tailwind CSS
- Technical Expertise: Machine Learning, Web Scraping, Cybersecurity, Full-Stack Development, Game Development
- Soft Skills: Leadership, Communication, Project Management, Documentation, Problem-Solving

WORK EXPERIENCE

CERN, Arlington, TX

Sep 2024 – Now

Undergraduate Researcher

- Pioneering the application of machine learning algorithms to simulate subatomic particle behavior, significantly enhancing predictive accuracy for high-energy collider experiments.
- Contributing to the cutting-edge research efforts of the ATLAS Project, one of the most prominent physics experiments globally.
- Collaborating with leading physicists to develop novel models that optimize experiment outcomes, advancing the frontiers of particle detection and data analysis in the field.

NASA L'Space Academy, NASA L'Space Program

Aug 2024 – Now

- Collaborating on mission concept design and execution, engaging in advanced space engineering coursework and simulations.

Ericsson, Arlington, TX

Jun 2024 – Now

Strategy Co-op, RAN Advanced Architectures Engineer (Software Engineering) Intern

- Spearheaded the development of a full-stack competitive analysis platform, leveraging Next.js, Express.js, and PostgreSQL, that automated the workload of 10+ employees, optimizing resource allocation and boosting data-driven decision-making.
- Handpicked to report directly to Market Area North America's Executive Team, contributing to high-level decision processes.
- Selected as a top 10 performer out of 50 interns for delivering exceptional project outcomes with significant organizational impact.

Bell Flight, Fort Worth, TX

Sep 2021 – Jan 2022

IT (Cybersecurity/Software Engineering) Intern

- Migrated a legacy MySQL database to MSSQL and PHP, improving system performance by a projected 15%, while minimizing downtime during transition and optimizing database architecture.
- Developed a company-wide Business Data Access script, drastically enhancing data accessibility and reducing retrieval time.
- Led risk assessments for key system migrations and database updates, ensuring data integrity, security, and operational continuity.
- Optimized the Material Pass project's database structure, enhancing flow and significantly boosting overall operational efficiency.

PROJECTS

Battleground UTA CTF, Cybersecurity Club, Independent Project

Aug 2024 – Sep 2024

- Designed and implemented a Capture-The-Flag (CTF) training platform used by over 70 students and faculty, emphasizing cryptography and binary vulnerability challenges.

Neuro Reader, Independent Project

Aug 2024 – Aug 2024

- Developed JavaScript-based extension to enhance reading for individuals with Dyslexia and ADHD with growing user base.

Genscript, Independent Project

Jun 2022 – Dec 2023

- Developed a secure installation script for Gentoo Linux, featuring over 30,000 lines of code for full-disk encryption, SE-Linux hardening, and NSA-compliant security protocols.