ANNA ZHENG

📞 386-334-8553 ✉ zanna3715@gmail.com 🔗 linkedin.com/in/anna-zhengg ⭘ github.com/crimzxun

Education

University of Central Florida — Orlando, FL
Bachelor of Science in Computer Science, Minor in Mathematics | GPA: 3.92 — *May 2025*

Experience

Software Engineer Intern — **Feb 2025 – Present**
Society of Hispanic Professional Engineers UCF — *Orlando, FL*
- Engineered core responsive UI features for SHPE UCF's new official website using the **T3 stack** (Next.js, Tailwind CSS, tRPC, Supabase, Drizzle ORM), supporting **100+** members and officers.
- Implemented sponsorship and donation system with **Square API**, enabling secure online payments and streamlining fundraising workflows.
- Developed member profile system using **Supabase, Resend and Square APIs** and enhanced shop management features including item creation and editing.

Software Engineer Intern — **Feb 2025 – May 2025**
ZuLeris Interactive — *Orlando, FL*
- Co-developed a high-fidelity **Unity/C# tactical communications training simulation** in support of DoD, enabling operators to practice configuring radios, maintaining connectivity, and countering electronic warfare threats.
- Built immersive **3D environments** (Open Field, Rural, Urban) with dynamic weather effects (rain, fog) and ambient audio to simulate real-world communication challenges.
- Developed the **AN/PRC-148 MBITR tactical radio emulator UI**, implementing realistic battery drain, charging, and button functionality to mirror actual device behavior.

Undergraduate Learning Assistant (ULA) — **Aug 2022 – Dec 2024**
University of Central Florida — *Orlando, FL*
- Guided **200+** students across **4 core computer science courses** and multiple semesters by assisting with **debugging**, providing **strategic problem-solving guidance and optimization**, and **reinforcing core programming concepts**.
- Organized and taught weekly lab sessions of **30+** students to introduce new programming topics, deliver **live coding demonstrations**, and reinforce lecture material through **visual illustrations** and **step-by-step coding techniques**.
- Held weekly office hours (in-person and virtual via Zoom, with additional support via Discord and email) to address technical questions, clarify complex topics, and provide **individualized academic support**.
- Led **review sessions** via Zoom and proctored exams/quizzes in ensuring academic integrity and smooth exam administration.

Projects

AesthetiQR | *MongoDB, Express, React, Vite, Node.js, TypeScript, Tailwind CSS, Postman, OpenAI API, Git* — **Mar 2025**
- Designed and implemented core UI/UX for an interactive QR code generator using **Figma** and **React/Typecript/Tailwind CSS**, enabling users to craft customizable, visually artistic QR codes using the **QrCodeStyling** library.
- Integrated backend APIs to support QR code customization, user authentication, profile management, and a personalized dashboard for saved designs.
- Implemented **OpenAI API** for AI-driven image generation, along with image upload, whiteboard drawing, and shaped-based tools to expand creative design options.

Veilrunner | *Azure DevOps, Jira, Unreal Engine 5, C++, Blender, Resprite, Krita, Git* — **Sept 2024 - Apr 2025**
- Collaborated with a team of **6** to design and develop a 2.5D PvE auto-shooting survival game combining pixelated 2D characters with a low-poly 3D world in **Unreal Engine 5**.
- Created and animated **2D pixel art** omnidirectional character sprites and background assets using Resprite, and integrated skill effects into combat to enhance visual appeal and gameplay fluidity.
- Researched enemy AI and designed/integrated cohesive **UI/UX** components, ensuring responsive controls and an intuitive player experience.

University Event Site | *XAMPP, Apache, MySQL, PHP, Google Maps API* — **Apr 2024**
- Developed a full-stack web application with role-based access (super admin, admin, student) for university event and organization management using **PHP**, allowing students to join organizations, create events, and engage via comments and ratings.
- Implemented event geolocation with **Google Maps API**, enabling events to be pinned by latitude/longitude and explored visually.

Technical Skills

Languages: Python, JavaScript, TypeScript, R, C, C++, Java, HTML, CSS, SQL
Frameworks & Libraries: React, Next.js, Node.js, Express.js, Tailwind CSS, tRPC, Pygame/OpenGL
Developer Tools: Git, Plastic SCM, VS Code, Eclipse, XAMPP, Android Studio, Unity, Unreal Engine, MongoDB, Jupyter Notebooks, Microsoft Azure
Certifications: Microsoft Office Specialist, Adobe Photoshop, Adobe Illustrator
Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming, Algorithms for Machine Learning, Processes of Object-Oriented Software Dev., Computer Graphics, AI for Game Programming, Artificial Intelligence, Robot Vision