Ryan Walters ryanchwalters@gmail.com xevion.dev github.com/Xevion

Education

The University of Texas at San Antonio

June 2021 – May 2025

Systems Programming, Data Structures, Computer Programming II

Work Experience

Software Development Intern

May 2022 - Present

Black Pearl Technology, Inc.

- Designed a multi-platform mobile application with Xamarin Forms, a Microsoft SQL database & ASP.NET webserver to help scale productivity at a remote manufacturing facility.
- Created a component management & inventory system supported by a custom MH 10.8 ANSI barcode scanner in a mobile app enabling fast provisioning and insertion of items into a RFID-based tracking system.
- Developed a low-level microcontroller program to interface with a TI RFID/NFC Transceiver to read & write raw byte blocks and UIDs off ISO 15693 tags.
- Utilized custom dual SPI-bus design to interface a microcontroller and RF transceiver simultaneously.

Projects Officer

April 2022 - Present

The Association of Computing Machinery at UTSA Student Chapter

- Assisted ACM members with projects ranging from development, troubleshooting, learning material & recruiting.
- Developed and presented lectures on various technologies useful for project (or personal) development.
- Revamped ACM-UTSA's website design & login/attendance system to improve member experience.
- \bullet Conceptualized & assisted development of a grant-based funding system for student projects.

Projects

See more here

- <u>Runnerspace</u> (2022)
 - o Developed a retro UTSA-themed social media website for <u>RowdyHacks 2022</u> in less than 36 hours with just Flask, Sass, SQLAlchemy ORM and one team member.
 - o Featured form validation, deployment on Heroku, active login/registration, profile editing, online indicators, profanity filters and a blog post here.
- **Xevion.dev** (2022)
 - Created a personal website for blogging and portfolio purposes with Jekyll, Sass and Liquid templating with zero frameworks, hosted on GitHub Pages for free.
 - o It features compressed HTML (1.7 KB) in an elegant, LaTeX-inspired, dark mode theme.
- <u>The Office</u> (2022)
 - Engineered a statically generated, Vue-based, and Firebase-hosted quote viewing & searching application for the hit 2005 sitcom 'The Office'.
 - Included a RegEx text extraction and XML/JSON transformation engine supporting zero/single/multicharacter quotes with substring name linking.
 - Indexes over 50,000 quotes and 300 unique characters while provides <2ms real-time searches with Algolia.
- **Phototag** (2020)
 - o Devised a command-line-based application for the automated tagging of photos with useful keywords based on their content (objects, shapes, properties) using Google's Vision API.
 - When embedded into a photography workflow, this application can accurately tag entire galleries in under 10 seconds with hundreds of high-performance SEO tags.

Skills & Tools

Languages Python, Java, C, Kotlin, C#, JavaScript (ES6), Typescript, Markdown, Elixir, Jinja2, Liquid

Frontend HTML5, CSS3, Vue, Jekyll, PyQt5, Webpack, Sass, Bootstrap, jQuery, Jinja, Hugo, Tkinter

Backend Django, Flask, Express, ASP.NET

Database SQLite, PostgreSQL, SQLAlchemy ORM, Entity Framework, Cloud Firestore, Algolia Search

Miscellaneous PowerShell, Unity, Cloud Functions, Xamarin Forms, Soldering