Devin Stanley

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Summary

Software developer with a strong foundation in C#/.NET desktop applications, embedded systems integration, and data analysis. Proven ability to own full product cycles—from architecture to deployment—across scientific, firmware, and DAQ systems. Driven and proactive, consistently pursuing opportunities to improve workflows, adopt new tools, and deliver measurable results.

Professional Experience

Junior Software Developer, ***Alphane Labs***

Oct 2022 - Present

- Streamlined test setup by implementing EEPROM-based configuration saving, eliminating repetitive steps and **saving 10 minutes per test start**.
- Led the migration from LabVIEW to a WPF-based C#/.NET DAQ platform, adding equilibration detection and **reducing data acquisition time by 30%**.
- Architected an **Azure-based database system** and developed a WPF-based C#/.NET tool for seamless data access and sample tracking, authoring SOPs and leading company-wide training.
- Built a WPF-based C#/.NET application to plot CSV data interactively, supporting multi-region selection and live updates, **cutting post-processing time by 20%**.
- Boosted computational efficiency of two Python data-analysis modules: improved time-series alignment **(2x faster)** and optimized nonlinear-system solver **(-20% runtime)**.
- Created a **Docker image and GitHub Actions workflow** for automatic firmware compilation, ensuring consistent builds and one-step deployment per push.
- Spearheaded development of a production-grade **WPF-based C#/.NET** application, managing requirements, testing, bug tracking, and user feedback to deliver a robust team-level product in **under 3 months**.

Education

Master of Science, Computational Science with Emphasis in Data Science, ***SDSU***

May 2024

- **Thesis:** Parallelized Compressed-Sensing Based Kirchhoff Prestack Migration
  - Explored approaches to seismic data migration using compressed sensing with SPGL1 (Spectral Projected Gradient for L1 Minimization), improving the quality of subsurface images compared to traditional methods.
  - Implemented parallel computing solutions using CUDA and OpenMP to accelerate data processing and evaluate computational performance across methods.

Bachelor of Science, Applied Mathematics with Emphasis in Computational Science, ***SDSU***

May 2022

- **Honors:** Summa Cum Laude, Merit Scholarship, Dean’s List for All Semesters

Skills

Programming Languages: Python, C#, C/C++, Mathematica, MATLAB

Frameworks and Tools: WPF, Jupyter, Git, Docker, OpenMP, Azure, WinForms, LabVIEW

Spoken Languages: English, Spanish