David Solinsky

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PROFESSIONAL EXPERIENCE

Swift

January 2025 - Present

Manassas, VA

Associate Developer/Systems Engineer

- Supporting a Spring Boot message extraction service for data lake creation in collaboration with data engineers and data analytics extraction
- Upgrading and migrating systems via automated Ansible playbooks
- Assisting with benchmarking and optimization efforts for the Swift financial messaging system

GEOST

April 2023 – August 2024

Reston, VA

Software Engineer, Mission Systems

Developed satellite payload test software for payload data packet classification to control payload peripherals and retrieve telemetry

- Developed payload test software in C to control satellite camera payload via user command data packets.
- Built custom data packet for telemetry to differentiate general telemetry from specific transmissions.

Developed a secure data processing system for payload classification, ensuring proper segregation and transmission of unclassified and classified data

- Set up Docker for database services and secure data transmission, streamlining service interactions.
- Developed FastAPI endpoints with Pydantic/SQLAlchemy for efficient, secure data processing.
- Implemented unit tests and agile practices for reliable code and project management.
- Wrote a logging service on a separate thread in C for unifying and optimizing messages.

Developed an web application with an AWS Dockerized microservice architecture integrating the AstroUXDS design library with CesiumJS, enabling interactive 3D visualization of space objects

- Integrated PostgreSQL for dynamic 3D visualization and interaction with space object data.
- Developed CRUD functions with SQLAlchemy and Pydantic for efficient UI and back end operations.
- Implemented UI features like filters, pagination, and toggles to enhance interaction in Typescript/CesiumJS.
- Built FastAPI-based APIs for real-time data exchange between front end and database.
- Collaborated with analysts and engineers nationwide to develop space-based software solutions.
- Performed Integration tests in PyTest to ensure accurate payload and ground system data transmission

Raytheon Technologies

August 2022 – April 2023

Software Engineer (Subcontracted by ISYS Technologies)

Silver Spring, MD

Maintained critical software for the Raytheon AWIPS contract with the National Weather Service (NWS), resolving weather forecast configuration issues affecting warnings.

- Collaborated in Scrum stand-ups and resolved debug tickets using Kanban boards via Remedy and Redmine.
- Investigated problems in Java, Python and XML files on RHEL/CentOS to remedy user configuration issues.
- Engaged clients at the NWS office to gather feedback on challenges to prioritize current needs of the team.

EDUCATION

College of William and Mary

Williamsburg, VA

Bachelor of Science in Computer Science

2022

Honors: Dean's List: Fall 2020 - Spring 2021

TECHNICAL SKILLS

- Programming Languages: C/C#/C++, Python, Java (Spring Boot), HTML/CSS/JavaScript(ReactJS, Svelte, SolidJS), Rust
- Markup Languages: LaTeX, JSON, CSV, XML

- Databases: SQL (MySQL, SQLite, PostgreSQL), MongoDB
- **DevOps:** Selenium, Jenkins/SonarQube, Docker/Podman, Kubernetes
- **Tools**: Vim, VSCode, Visual Studio, Eclipse, Rider, Clion, Android Studio, Git/Github/Gitlab, Bitbucket/Jira/Confluence
- Server Operating Systems: Windows, MacOS, Linux (Ubuntu, Mint, Manjaro, CentOS, RHEL)