

# David Solinsky

Herndon, VA 20171

P: (571)524-7794 | E: [dsolinsky98@gmail.com](mailto:dsolinsky98@gmail.com) | [www.linkedin.com/in/david-solinsky/](https://www.linkedin.com/in/david-solinsky/)

---

**Career profile:** Detail-oriented Software Engineer with experience in developing web applications and secure data processing systems. Proficient in integrating SQL databases, creating CRUD functions, and utilizing FastAPI for real-time data exchange. Adept at containerization using Docker and implementing agile methodologies. Passionate about using game engines for data visualization and building customer-facing interactive experiences.

## PROFESSIONAL EXPERIENCE

### GEOST, Reston, VA

April 2023 – August 2024

*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 for differentiating 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.

**Led the development of a web application 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 and 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.
- Created Dockerized PyTest integration tests to ensure accurate data transmission between payload and ground systems.

### Raytheon Technologies, Silver Spring, MD

August 2022 – April 2023

*Software Engineer (Subcontracted by ISYS Technologies)*

**Maintained critical software for the Raytheon AWIPS contract with the National Weather Service, 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.

## EDUCATION

### College of William and Mary

*Bachelor of Science in Computer Science*

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

Williamsburg, VA

2022

GPA: 3.25

## TECHNICAL SKILLS

- 
- **Programming Languages:** C/C#/C++, Python, Java, HTML/CSS/JavaScript(ReactJS), Rust
  - **Markup Languages:** LaTeX, JSON, CSV, XML
  - **Databases:** SQL (MySQL, SQLite, PostgreSQL)
  - **DevOps:** Git/Github/Gitlab, Bitbucket/Jira/Confluence, Selenium, Jenkins/SonarQube
  - **Editors:** Vim, VSCode, Visual Studio, Eclipse, Rider, Clion, Android Studio
  - **Game Engine/3D:** Godot, Unity, Blender
  - **Server Operating Systems:** Windows (WSL), MacOS, Linux (Ubuntu, Mint, Manjaro, CentOS, RHEL)