Adil Shirinov

Email: ashirinov203@gmail.com LinkedIn: adilsh Website: adilshirinov.com GitHub: spoty76qit

Education

Georgia Institute of Technology – Aerospace Engineering B.S. and M.S.

Aug 2020 - May 2025

GPA: 3.87 B.S. | 3.88 M.S.

AWS Solutions Architect – Certification In Progress

Sep 2025

Skills

Languages: Python, SQL, C#/C++, JavaScript, MATLAB, HTML, CSS

Frameworks: **Scikit-Learn, NumPy**, Pandas, PyTecplot, Plotly, Next.js, **React, Flask,** Dash Tools: Docker, **Git**, Linux, **AWS** (**EC2**), MySQL, MongoDB, Ansys, Converge CFD, JIRA

Other: Agile, Server Administration, Networks, Automation, Fluent in English, Russian, Japanese

Experience

CPM Supply And Services Inc. – Chief Technology Officer (Part Time)

Jun 2025 - Current

- Architected remote **Linux** server infrastructure and configured network gateways
- Deployed NextJS based CRM system using MongoDB backend with Prisma through Docker
- Automated backups through Cron and deployed a NAS for internal files
- Delivered comprehensive IT services to 22 employees

Ben T. Zinn Combustion Laboratory – Automation Architect

Sep 2022 - May 2025

- Developed **Python** automation framework for Computational Fluid Dynamics design optimization
- Built a comprehensive WebApp using Flask and Plotly with MySQL backend for case monitoring
- Created **scripts** for parametric design studies, automated mesh generation and post-processing
- Accelerated design convergence by 15% by using **Scikit-Learn** surrogate models for turbulence

Georgia Tech – Teaching Assistant

Jan 2023 - May 2023

- Produced learning materials and delivered lectures on Dynamics course
- Used **effective communication** to bridge knowledge gaps for 71 students

Projects

Gringotts – Financial Analytics Application

May 2025 - Jul 2025

- Developed full-stack expense tracking WebApp using Python, Dash, and MySQL
- Created **connection pool** management system for load balancing across CPU cores
- Wrote a bank statement import functionality and predictive analytics for net worth forecasting
- Designed interactive dashboards with Plotly for multi-level visualization and performance analysis

Kronos – Digital Twin, Team Lead

Aug 2023 - May 2024

- Led a team of 10 engineers to win 1st place at the AIAA Venus Exploration Fall Capstone competition
- Created a high-fidelity Digital Twin for an aircraft landing on Venus simulations
- Implemented real-time trajectory prediction using **Python** and **C++** with 3D visualization
- Utilized Agile methodology and Gannt Chart for project management and stakeholder coordination

EngineX – Rocket Engine Optimizer

Feb 2025

- Deployed an optimization platform using OpenMDAO and Scikit-Learn surrogate models for rocket engine design
- Integrated Cantera for combustion calculations with IPOPT optimizer for constraint handling
- Achieved 15% improvement in specific impulse through automated **Python** optimization

CV Navigation – Autonomous Aircraft System

Mar 2022 - Apr 2022

- Implemented OpenCV C++ algorithm for automated target detection and landing in autonomous gliders
- Integrated Pixhawk autopilot with LiDAR sensor for precise altitude determination
- Optimized flight control software for autonomous glider deployment and recovery

RoboTech Hackathon - Team Lead

Apr 2022

- Led team of 3 to develop autonomous oceanic microplastic cleaning robot
- Used a short-term Agile strategy to create a feasible low-cost design in 36 hours
- Won 2nd place overall and 'Most Creative Project' award