

# Meghan Hatzipetro

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## PROFESSIONAL EXPERIENCE

RTX | Dallas, TX

### Principal E&E Engineer

2019-2025

- Interfaced with customers to create SOWs and secure funding for website development projects, ensuring alignment with business goals and delivering tailored solutions.
- Led the design and development of responsive, user-centric websites leveraging Agile methodologies to promote iterative progress and adaptability with Daily scrums and bi-weekly Customer Status'.
- Engineered robust backend systems with technologies such as Python, Flask, CherryPy, IIS, NGINX (et al) using databases such as SQLite, MariaDB, Snowflake, and Oracle and deployed via Bitbucket & Jenkins as a CI/CD Pipeline.
- Developed & communicated with RESTful APIs to facilitate efficient client-server communication both internally and externally.
- Delivered dynamic and interactive frontend interfaces utilizing Angular, TypeScript, JQuery, and JavaScript, optimized with Bootstrap and MaterialUI, enhancing usability and engagement.
- Amongst others, created Obsolescence Monitoring Web Tool with Live Charting, Forecasting, Cradle to grave issue tracking, and real-time data aggregation from multiple RESTful API Sources.
- Provided mentorship to other developers offering guidance on coding best practices, reviewing code for quality and efficiency, and running pair programming sessions.

Pratt & Whitney | East Hartford, CT

### Aerothermal Systems Engineer

2017-2019

- Analyzed micro-level bearing compartment thermals for commercial and military jet engines to prevent auto-ignition and coking events
- Designed and managed a lubrication system for a military engine by providing supplier and cross-team support to ensure proper systems integration and handling of systems level requirements
- Led real time ground control as a systems lead during comprehensive aircraft propulsion tests
- Supported engine validation as the subject matter expert by providing real-time feedback and assisting technicians in troubleshooting
- Created an autonomous engine monitoring program using Apache spark and python to ensure engine health and safety via 60 parameters checked daily and compared across various engines
- Used big data to construct multivariate regressions to predict in-field engine failures
- Programmed logic to flag automatic trigger of system maintenance
- Developed a program to improve system modeling methods of non-homogenous compressible flow using a combination of C++, Fortran, VBA, and Simulink

Sikorsky | Stratford, CT

### Quality Intern

2016

- Developed the Quality Plan for the Bridgeport Relocation
- Assisted in Product Quality Deficiency Reports
- Completed First Article Inspections

Pratt and Whitney | East Hartford, CT

### CTSC Operations Intern

2015

- Assisted in a DIVE resulting in a savings margin of approximately \$500,000 per year
- Won the Intern Networking Competition

- Ran return on sales statements

**AVTECH** | Warren, RI

### **Mechanical Engineering Intern**

**2013-2015**

- Developed medical and environmental monitoring devices
- Managed and repaired hardware malfunctions
- Wrote technical documents for publishing
- Operated as a technical support analyst

## **TECHNICAL SKILLS**

### **Frontend Technologies**

Angular, Typescript, HTML, Javascript, JQuery, CSS, Bootstrap, Tailwind, Material UI, React

### **Backend Technologies**

Python, Flask, CherryPy, IIS, Nginx, AWS Cloud, Redhat, Windows, SQL (Oracle, MariaDB, SQLite), C++, Visual Basic, Jenkins, Bitbucket, SVN

### **Other**

Adobe Suite, Microsoft Office Suite, Solidworks Modeling & Simulation, MATLAB, Visual Basic, Russian, Spanish, Fortran, AutoCAD, ANSYS, Redhat, JIRA, Postman, AWS, Azure, Microsoft PowerBI, ZingCharts, Reference Application, Entity-Relationship Diagrams

## **EDUCATION**

*Bachelor of Science in Engineering*

**2017**

**Roger Williams University** | Bristol, RI

*ABET Accredited*

**Specialization:** Mechanical Engineering **GPA:** 3.67

*Magna Cum Laude*

**Minor:** Mathematics

## **AWARDS AND RECOGNITION**

❖ Excellence in Engineering (Pratt & Whitney)	2018
❖ TALON (Team Achievements Leveraging Outstanding Support)	2018
❖ Intelligent Ground Vehicle: Rookie of the Year	2017
❖ Vanasse Hangen Brustlin Inc Scholar of the Year	2015-
❖ Excellence in Engineering (RWU)	2016
	2013