ResCon Technologies, LLC is seeking a Guidance, Navigation & Control Engineer

Opportunity Description

ResCon is seeking a software engineer with a background in Guidance, Navigation & Control (GNC), including inertial navigation system operation and aerospace vehicle control. Ideal candidates will have a deep understanding of underlying Inertial Measurement Unit (IMU) physics and operational characteristics. Experience with machine learning, embedded systems, data analysis, and predictive maintenance is also highly desired. As a GNC Engineer, you will aid in the development of several software products for both commercial and US Government customers.

Who We Are

ResCon Technologies is a spinout of The Ohio State University and was founded in July 2020 by Brian Gyovai, a retired Air Force pilot, Dr. Daniel Gauthier, professor of physics at OSU, and Dr. Andrew Pomerance, president of Potomac Research, LLC. Our mission is to revolutionize the capabilities of edge devices by deploying extremely low-power and low-data machine learning algorithms to existing and developmental systems. ResCon's ML-augmented data fusion and state estimation algorithms form the basis of our adaptive control and health monitoring software offerings. We aim to take ML processes out of the cloud and deploy them directly on-device, putting the smarts *into* smart systems. Applications range from high-speed vehicles to autonomous robots to wearables.

Who We Are Seeking

The successful candidate will be passionate, relentlessly curious, and willing to reinvent the status quo.

Required Qualifications

- US Citizenship (due to multiple ongoing US Department of Defense projects)
- At least 5 years of relevant experience as a GNC Engineer
- Master's degree or higher in Computer Science, Physics, Engineering, Data Analysis, or similar (Bachelor's Degree acceptable with strong relevant experience)
- Proficient in C/C++ and Python
- Familiar with data analysis and ML applications in C/C++, Python, MATLAB or similar

Desired Qualifications

- Experience coding adaptive control schemes and/or navigation solutions for novel aircraft (e.g. high-speed vehicles and/or those with morphing control surfaces, active flow control, etc.)
- Hands-on experience building aircraft, drones, robots, and/or other autonomous systems
- Familiar with PX4, Ardupilot, Betaflight, or other open-source UAS flight stack software
- Familiar with ROS and associated robotics software
- Background in control theory or data sciences, especially predictive maintenance