RESCON TECHNOLOGIES
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www.flyrescon.com

ResCon Technologies, LLC is hiring a Machine Learning Algorithm Developer

As a Machine Learning (ML) algorithm developer, you will be responsible for integrating ResCon's revolutionary ML code into priority systems of interest.

Opportunity Description

ResCon is seeking an ML algorithm developer to help create models of complex systems. ML-based models will be deployed to embedded systems to facilitate adaptive control, forecasting of future behavior, predicting health and status and end-of-life, and providing actionable insights to users. Our current focus areas include unmanned aerial systems (UAS) autopilots, inertial measurement units, and integrated power, propulsion, and thermal (PPT) management systems for aerospace vehicles. *This is a full-time position that requires US citizenship and the ability to relocate to Columbus, Ohio.*

Primary Responsibilities

- Research the underlying physics of novel systems of interest to ResCon's customers
- Develop physical- and machine-learning-based models of these dynamical systems
- Collaborate with ResCon's software engineers to deploy models to embedded hardware
- Design and implement experimental procedures for testing model accuracy
- Collaborate with the ResCon team to develop intuitive user interfaces for the ML models
- Compose reports on algorithm functionality for use in training new ResCon customers and future employees
- Participate in writing proposals for US Government funding opportunities related to ResCon's core capabilities
- Interact with customers to showcase ResCon's capabilities

Auxiliary Responsibilities

As a startup, all employees are expected to pitch in to multiple activities related to scaling the company. These include, but are not limited to:

- Taking a leadership role on current core projects
- Collaborating with the founding team on ResCon strategic planning
- Establishing and scaling new ResCon offices and experimental facilities
- Training new employees

Who We Are

ResCon Technologies is a spinout of The Ohio State University and was founded in July 2020 by Brian Gyovai, a 23-year Air Force veteran, 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 sUAS by embedding machine learning to enable fast, low-power data fusion and edge processing. ResCon's ML-augmented flight control algorithms make UAS safer, more efficient, and more agile, all while offering unprecedented insight into the health and status of the aircraft.

Who We Are Seeking

The successful candidate will be a foundational member of ResCon, and key to a small team dedicated to making an impact in the edge computing and UAS space. They will be passionate, relentlessly curious, and willing to reinvent the status quo. We seek candidates who have a strong background in mathematics and in a technical area such as physics, aerospace engineering, mechanical engineering, or related fields.

Minimum Experience

- BS in Computer Science, Engineering, Physics, Mathematics, or related fields
- Proficiency in C/C++ and Python
- Experience in mathematical modeling and numerical simulation of dynamical systems
- Familiarity with data analysis and ML applications in C/C++ and Python

Desired Experience

- Professional experience developing and implementing ML algorithms
- Passion for all things aerospace with experience building drones, robots, or other projects involving microcontrollers

Position Requirements

- U.S. Citizenship is a must-have due to multiple ongoing US Government projects
- Immediate availability, though start date is negotiable