

# Michael H. Wheatman

20369 Clover Field Terrace | Sterling, VA 20165

Phone: (215) 326-9809 E-Mail: michael.wheatman@gmail.com

## Summary

A software engineer specializing in defense minded applications and systems. I possess a rigorous academic background, systems architecture experience, and strong communication and problem-solving skills. I am an engineer and researcher with experience in robust scalable distributed systems. I am an expert in the full lifecycle of software management for the maritime undersea environment.

## Experience

### **Principal Software Engineer – Advanced Undersea Systems (PMS 394) – NAVSEA - US Navy      2021 – Present**

- Drives technical strategies for large-scale projects and infrastructure while coordinating efforts among multiple teams of engineers to support mission success. Utilizes Top Secret/SCI Clearance.
- Manages software elements of procurement and sustainment of a wide variety of maritime undersea mission platforms.
- Directs efforts related to the full operational profile including undersea, topside, and ashore elements. Oversees architecture, development, testing, deployment, and sustainment of software elements of a variety of platforms (UUVs, ROVs, Manned Undersea vehicles, etc.). Coordinates reuse of capability and commonality among multiple mission platforms.

### **Research and Development Engineer 3 – The Applied Research Laboratory at Penn State      2019 – Present**

- Carry out underwater autonomy research for US Navy undersea and surface drones.
- Agent-Based UMAA Reference Autonomy (AURA) Lead Software Architect and Team Lead
  - Developed a novel extendable maritime autonomous vehicle control system. Manage technical design, implementation, review, and maintenance of the software system. Develop and Oversee DevSecOps pipeline to ensure system stability and maintainability.
  - Lead field test validation of the system to ensure requirements are met. Coordinate team members' effort by managing the work queue using the Kanban methodology. Ensure that all items are documented, triaged, worked, tested, and resolved.
- Unmanned Maritime Autonomy Architecture (UMAA) Specification Working Group Team Lead
  - Lead development effort to design the Unmanned Maritime Autonomy Architecture (UMAA) standard specification for maritime vehicle control and management.

### **Software Engineer II – Raytheon Corp.      2015 - 2019**

- Developed high performance distributed systems to streamline the ordering, ingest, processing, and distribution of imagery data. Maintained Top Secret/SCI Clearance.
- Deputy Team Lead; YESNET East Region Director of Communications

### **Software Development Engineer Intern – Amazon AWS      2014**

- Worked in AWS Identity and Access Management building an internal registry designed to centralize and organize the metadata and development information for all AWS services and APIs.

### **Computing Support Assistant – Carleton College ITS      2011 - 2015**

- Worked to provide technical support to students, faculty, and staff of the College.

## Education

### **Pennsylvania State University – Computer Science and Engineering (MS)      2016 - 2021**

- Thesis: Standard Interfaces for Unmanned Autonomous Systems.

### **Carleton College – Computer Science (BA), Cognitive Science (minor)      2011 - 2015**

- Served on Library and Information Technology Governance Committee
- Thesis: Augmented Reality on Mobile Systems.

## Skills

Cloud Computing Technologies, Full Stack Java Development, Agile Software Development, Python Development, Computer Security, Distributed Systems Design and Development, Artificial Intelligence, Machine Learning, SQL and NoSQL Database Systems, Unmanned Control Systems, Vehicle Autonomy, DoD Procurement and Sustainment Processes.