### PROFESSIONAL SUMMARY

Dedicated software integration and data operations professional, with a diverse background spanning nuclear, mechanical, electrical, and software engineering. Proficient in SQL database development and versatile in multiple programming languages. Comprehensive understanding of project management derived from varied experiences and a passion for research implementation.

### **SKILLS & ABILITIES**

- Programming Languages: Python, VBA, C#/C++, Java, HTML/JS
- Database & Backend: SQL, MongoDB, MySQL, Docker
- Machine Learning: Predictive Models, PyTorch, Large Language Models (LLM), NLP, Computer Vision, Reinforcement Learning (DQN, PPO)
- Cloud Computing: AWS, Azure
- Tools: Microsoft Access, Tableau, VS Code, GitHub
- Methodologies: Agile, ML Ops, Continuous Delivery
- Clearance: Secret Security Clearance

#### Agora Research 2023-Present Remote

# **Open Source Developer**

- Developed a high-fidelity simulation environment for Single Architecture Ensemble with swarm control on drones. Integrated deep learning techniques for real-time environment sensing and drone control. Github
- Engineered and trained several neural network models capable of interpreting and executing a wide range of data and tasks. Implemented cutting-edge models from academic research to the open-source community for collaborative development and application. HuggingFace
- Created large open source datasets on various tasks and domains, available for large language model training. Huggingface
- Integrated a number of new research papers, while collaborating with an open source community, teaching others on research implementation.
- Designed and deployed a scalable cloud hosting solution for serving LLM applications to a global audience, utilizing Terraform and Kubernetes for infrastructure and orchestration.
- Implemented a variety of Mixture of Experts including lightweight basic transformers, to advancing the MoE concept by integrating it with vision transformer architecture.
- Developed several autonomous agents with capabilities ranging from code generation, natural language processing for conversational AI, to execution of general computational tasks.
- Collaborated with an open source community nearly daily to read new research papers and stay up to date on the latest technological advancements

## Tetrad Digital Integrity, LLC

Norfolk, VA **Cyber Security Database Developer** 

2023-Present

- Translated functional requirements into technical solutions that can be implemented within a database environment, ingesting data from various sources via manual or automated methods.
- Hosted a ship policy repository of cybersecurity standard operating procedures, policies, scanning results, incident reports and cybersecurity posture reports. Created data models, database metrics reports, and dashboards using Tableau.
- Developed and maintained the Extract, Transform, and Load process to support database and data operations.
- Supported ad-hoc queries by users against data sets determined by functional requirements.

# **Huntington Ingalls Industries**

Newport News, VA

2021-2023

# **Engineering Technician 3**

- Collaborate with cross-functional teams to deliver high-quality products.
- Managed tracking and data entry for over 5000 separate work documents in a database
- Coordinating with clients to ensure work completion in a satisfactory and timely manner.
- Maintained and audited documentation for all individual jobs, safety tags, and authorization forms for a submarine overhaul.

#### Norfolk, VA 2015-2018 US Navy

## **Nuclear Machinist's Mate**

- I worked in both team and independent environments to complete over 1500 hours of rigid, procedurally oriented maintenance on Nuclear powered systems.
- Graduated Naval Nuclear Power School & Naval Nuclear Prototype Training Unit

### CERTIFICATIONS AND TRAINING

CompTIA: Security+ Certification

2023

Naval Nuclear Power School & Prototype Training Unit

2017