John Alling

DAF CLOUDworks DevSecOps Engineer
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Education

Harvard University, Cambridge, MA — May 2021
Master of Science in Computational Science & Engineering

Northeastern University, Boston, MA — May 2020
Bachelor of Science in Computer Engineering - *Summa Cum Laude*
- Honors: Tau Beta Pi Engineering Honors Society, Dean's List
- Minor: Mathematics

Technical Skills

Programming Languages:
Python (Tensorflow, Pandas, boto3, scikit-learn), SQL, C++, C, JavaScript/Typescript
Software Methods:
Agile, Extreme Programming, CI/CD, Containerization, Test Driven Development
Technologies:
Docker, AWS, Cloud Foundry, Gitlab, Github, Linux, Mac

Work Experience

Air Force Research Laboratory, Rome, NY
DAF CLOUDworks DevSecOps Engineer — June 2023 - Present
- Lead team of 12 **AWS** account management engineers for DoD cloud platform
- Construct **Gitlab CI/CD** pipelines to automate provisioning tasks for >50 apps
- Improve customer account provisioning speed 12x via task automation with **AWS EC2, S3, Cloudformation**, and **Lambda**

Kessel Run, Boston, MA
Software Engineer — June 2022 – June 2023
- Developed **Cloud Foundry** microservice apps to auto-plan air refueling missions
- Made 95% plan runtime improvement using **Python**, **TypeScript**, and **SQL**
- Utilized **Agile** and **XP** to enable cloud deployments in under 2 hours
- Migrated deployment stack to **Kubernetes** leveraging **Docker** & **Helm**

Air Force Research Laboratory, Rome, NY
Artificial Intelligence & Edge Computing Engineer — June 2021 - June 2022
- Built ML neuromorphic computing models using **TensorflowLite**
- Transitioned model baselines to low-SWaP platform, reducing lifecycle costs 10x
- Explored methods to build adversarial robustness in **Tensorflow** ML models

Air Force Institute of Technology, Wright-Patterson Air Force Base, OH
Reinforcement Learning Research Intern — September - December 2019
- Developed satellite reinforcement learning agents using **Python** & **OpenAI**
- Architected software packages using **Docker**

Massachusetts Institute of Technology Lincoln Laboratory, Lexington, MA
Advanced Capabilities and Systems Technical Assistant Co-op — June - December 2018
- Developed vision algorithms for DoD micro-UAV with **Python** & **OpenCV**
- Integrated systems using Robot Operating System (**ROS**) middleware

Oak Ridge National Laboratories, Oak Ridge, TN
Energy Efficiency and Renewable Energy Robotics Intern — June - August 2016
- Optimized instruction set size of **C++** algorithm for large-area 3D printers by 33%