YASH SARDA

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Secret Clearance

OBJECTIVE

Driven machine learning engineer with 1.5 years of experience, passionate about forwarding the application of artificial intelligence to challenging engineering problems. Successfully designed, tested, and presented multiple deep and reinforcement learning architectures for various DARPA, ARFL, and DoD contracts. Seeking machine learning, data engineer, data scientist, and software engineering roles.

SKILLS

Machine Learning: PyTorch, Tensorflow, RLLib, NumPy, OpenCV
Code: Python, Kotlin, MATLAB, Fortran 90, C++
Software/OS: Ubuntu, Docker**,** Windows, ANSYS Fluent, Solidworks
Languages: English, Hindi, Mandarin, Spanish

WORK EXPERIENCE

Machine Learning Engineer II | Shield AI/Heron Systems — Mar '21 – Aug '22

- Designed and implemented multi-head order-invariant transformer for win projection of StarCraft 2 battles
- Led integration of existing code library and machine learning models with DOD combat simulator NGTS
- Optimized NGTS classifier with over 92% accuracy for aerial engagement win probability and attrition
- Trained multiple reinforcement learning agents for over 1 million timesteps using PyTorch and RLLib
- Co-led intern project for reinforcement learning in game environments, delegating tasks and resources
- Designed and created 10 multi-layer stackable terminals for customizable agent environments

Advanced Air Mobility Intern | NASA Langley Research Center — Aug '20 – Dec '20

- Designed and ran computational fluid dynamics simulations of deflected wing slipstream on HPC
- Modified existing scripts to iteratively solve for wing geometry and export as mesh file

EDUCATION

The University of Texas at Austin | **BS, Aerospace Engineering** — Dec '20
GPA: 3.53
Certificate: Computational Science, Engineering, and Mathematics

PROJECTS/RESEARCH

Undergraduate RA | Computational Astronautics Science and Tech, UT Austin — Oct '17 – Feb '21

- Designed and tested a recurrent convolutional neural network for classification and object detection
- Integrated a kinematic back-propagation algorithm with object detection for localization and tracking
- Created a hand-assembled database of "falls" based on NASA records and eyewitness reports

Undergraduate RA | Computational Fluid Physics Lab, UT Austin — Mar '19 – Feb '21

- Modified Fortran DNS code by adding data read/write ability, reducing computing cost
- Analyzed eddy frequency data by scaling and transforming fluid structures
- Ran over 1000 simulations to develop a turbulent boundary layer