YASH SARDA

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SKILLS

Machine Learning: PyTorch, CUDA, Tensorflow, RLLib, NumPy, OpenCV
Code: Python, C#, MATLAB, Fortran 90, C++
Software/OS: Docker, Grafana, Prometheus, Ubuntu, Windows, ANSYS Fluent, Solidworks
Languages: English, Hindi, Mandarin, Spanish
Hobbies: Weightlifting, Martial Arts, Soccer, Snowboarding

WORK EXPERIENCE

Software Engineer | Portalis AI — July '23 - Present

- Redesigned Whisper speech-to-text architecture for deployment on AWS Inferentia, reducing STT price by 62%
- Designed async CUDA microservice for processing text embedding, speech-to-text, and semantic ranking requests
- Deployed various containerized architectures, including the CUDA inference service, to AWS ECS
- Added metrics, logging, and traces to all requests and tokens, allowing C-suite to predict product costing schemes
- Created visibility dashboards for production and development environments with Grafana and Prometheus

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

- Designed and implemented multi-head order-invariant transformer for metric 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 Langley K-cluster
- Modified existing scripts to iteratively solve for wing geometry and export as mesh file

EDUCATION

Georgia Institute of Technology | MS, Computer Science — Aug '24 - Present

The University of Texas at Austin | BS, Aerospace Engineering — Aug '17 - Dec '20
GPA: 3.53
Certificate: Computational Science, Engineering, and Mathematics

PROJECTS/RESEARCH

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
- Ran over 1000 simulations to develop a turbulent boundary layer