

ANANT KUMAR VERMA

Data Analyst Enthusiast

Bangalore, Karnataka · anantverma3558@gmail.com · +91 7453 015 236

 Anant Kumar Verma ·  AnantVerma-58 ·  AnantVerma-58

Projects

Pneumonia Classification using X-Ray images

- Developed a PyTorch-based machine learning project, exploring models like ResNet, DenseNet, VGG, and AlexNet.
- Conducted training experiments with various learning rates to optimize model performance.
- Trained the final model on a 5000-image dataset, achieving a 94% validation accuracy and 81% test accuracy.
- Implemented experiment tracking using MLflow for comprehensive model management and performance monitoring.
- Deployed the application using FastAPI and Docker for containerization.
- Uploaded the containerized app to Microsoft Azure for public access.

Soccer Twos Agent

- Trained a dynamic 2vs2 soccer team with a focus on outperforming opponent teams.
- Trained POCA agent for Soccer Twos using the Unity ML-Agents Library.
- The model underwent training, accumulating 5 million steps through self-play strategies.
- Achieved an ELO rating of 1392, securing the 228th rank in competitive bot fight competition.

Flappy Bird Agent

- Applied OpenAI Gym to create a custom simulation for Flappy Bird.
- Trained an agent proficient in navigating the environment, skillfully avoiding obstacles, and strategically collecting fuel for optimal survival.
- Utilized the VGG16 model in the training process.
- Achieved an impressive average score of 450+ in the simulation.

VizDoom

- Trained an agent in the challenging VizDoom environment, specifically in the 'Health Supreme' scenario using Sample Factory 2.0.
- Focused on optimizing the balance between exploration and exploitation, showcasing adaptive strategies.
- Achieved an impressive average score of 40+.

Fast Food Classification

- Led a deep learning project for classifying fast-food images, employing ResNet50, EfficientNetV2M, MobileNetV2, and DenseNet201 models.
- Achieved remarkable accuracies, with DenseNet 201 showcasing 82.01
- Demonstrated expertise in model selection, training, and testing, highlighting adaptability in real-world applications.

DestiNation

- Created a vacation planning platform, "DestiNation," leveraging machine learning models to analyze budget, vacation type, and destination preferences.
- Reduced planning time by 75% and increased customer satisfaction by providing personalized, real-time travel details.

Certificates

[Deep Reinforcement Learning Course - Hugging Face](#)

Used Deep RL libraries such as Stable Baselines3, RL Baselines3 Zoo, Sample Factory and CleanRL. Trained agents in unique environments such as SnowballFight, VizDoom (Doom) and Space Invaders.

[OpenCV Bootcamp](#)

Used OpenCV for image manipulation, object tracking, face detection, TensorFlow integration, and OpenPose for pose estimation

[Traninity Data Analytics](#)

Successfully completed the 8 Weeks Data Analytics Specialization Training

Skills

[Tech Skills](#) - Pytorch · Tensorflow · MLFlow · Tensorboard · Fastapi · Docker · Microsoft Azure · OpenAI Gym · MySQL · Deep Reinforcement Learning · Computer Vision · Machine Learning · Python · R · Power BI · Microsoft Excel

[Soft Skills](#) - Excellent verbal and written communication skills · Problem Solving · Critical Thinking

[Statistical Skills](#) - Statistical Inference · Regression Modelling · Time Series · Statistical Methods

Education

[M.Sc Data Analytics](#)

(06,2023 - Present)

Christ (Deemed to be University), Bangalore

[B.Sc \(Computer Science, Mathematics and Statistics\)](#)

(06,2020 - 06, 2023)

Christ (Deemed to be University), Bangalore

Languages

[English](#)

Full Professional Proficiency

[Hindi](#)

Native Proficiency

[German](#)

Elementary Proficiency

Interests

[Machine Learning](#) · [Automating Games](#) · [Reinforcement Learning](#) · [Technology](#) · [Table Tennis](#) · [Basketball](#)