Vignesh Edithal

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OBJECTIVE

Looking for Machine Learning Engineer roles in Computer Vision and Data Science domain.
Interested in contributing to challenging problems by leveraging programming and research skills.

WORK EXPERIENCE

Advanced Micro Devices (AMD) **May 2023 - December 2023 (expected)**
Machine Learning Research Intern **Markham, Ontario**

· Fine-tuned CLIP model to detect kill and death events in CSGO with 94% accuracy
· Surveyed more than 10 state-of-the-art Computer Vision models for Event Detection in Video Games
· Performance analysis of Vision Transformer, Masked Auto Encoders and ResNet using PyTorch
· Designed efficient data collection methodology to develop 50 GB in-house video dataset in a month

D. E. Shaw **July 2018 - July 2022**
Senior Member Technical **Hyderabad, India**

· Enabled firm-wide hierarchical permission management feature using Python and SQL backend
· Automated third party file transfers for HR using Python/Bash scripting leading to 10% ticket reduction
· Provided engineering support for production Linux cluster to SysAdmin team to reduce SRE escalations

PROJECT WORK

Brain Tumor MRI synthesis using aggregation of GANs **University of Toronto**

· Implemented and trained DCGAN and WGAN models from scratch with tuned hyper-parameters
· Pre-processed data using up/down-sampling and used style transfer for post processing
· Obtained PSNR and SSIM scores comparable to relevant literature
· Showcase research in poster presentation with industry/faculty and submitted conference format report

Novelty detection in texts **IIT Patna**

· Published research paper in COLING 2018 NLP conference: https://aclanthology.org/C18-1237.pdf
· Adapted CNN with self-attention deep network to detect novel semantics between texts
· Collected research feedback from AI-NLP-ML lab of IIT Patna through weekly presentations

EDUCATION

University of Toronto **September 2022 - December 2023 (expected)**
MSc in Applied Computing: Deep Learning, Computer Vision, Data Science, GPA: 4.0/4

IIT Madras **December 2021 - August 2022**
Diploma in Data Science: Statistics, Machine Learning, Business Analytics, GPA: 9.3/10

IIT Patna **September 2014 - May 2018**
BTech in Computer Science: GPA: 8.9/10

TECHNICAL STRENGTHS

Scripting	Bash, PowerShell, Python
Deep learning	Transformers, PyTorch, Keras, Hugging Face
Data Science	Pandas, Numpy, Matplotlib, scikit-learn, SQL Alchemy