

Vignesh Edithal

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OBJECTIVE

Looking for Machine Learning Engineer roles in Computer Vision and Data Science.
Contribute to challenging problems by leveraging analytical, programming and research skills.

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

PROJECT WORK

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

- Trained PyTorch implementation of DCGAN and WGAN including Hyperparameter tuning
- Pre-processing such as resize and up/down-sampling. Post-processing using style transfer
- Obtained PSNR and SSIM scores comparable to that of a scientific research paper
- Presented work to industry and faculty during poster presentation, submitted conference format report

Novelty detection in texts **IIT Patna**

- Capture semantic redundancy in documents using CNN and self-attentive network
- Presentation for feedback collection with the AI-NLP-ML group of IIT Patna
- Published in COLING 2018: <https://aclanthology.org/C18-1237.pdf>

WORK EXPERIENCE

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

- Literature Survey of state-of-the-art Computer Vision models for Event Detection in Video Games
- Fine-tuned a CLIP model to obtain 94% accuracy in detecting kill and death events in CSGO
- Evaluated models such as Vision Transformer, Masked Auto Encoders and ResNet using PyTorch
- Designed an efficient data collection methodology to develop an in-house dataset from scratch

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

- Contributed to firm wide permission management system using Python and SQL backend
- Scripted complex inter-team processes using Python/Bash to reduce SysAdmin tickets by 25%
- SRE support for in-house Linux cluster and Windows farm to prevent critical issues

TECHNICAL STRENGTHS

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