Varun Venkatesh

varunvprof@gmail.com github.com/varunvenkatesh7 linkedin.com/in/varunvenkatesh7 5519984896

EDUCATION

University of Pittsburgh 08/2019 – 05/2023
BS Computer Science, 3.94 GPA

Relevant Coursework: Deep Learning, Practical Artificial Intelligence, Operating Systems, Algorithm Implementation, High Performance Computing, Linear Algebra, Applied Statistics

EXPERIENCE

NVIDIA 05/2021 – 08/2021
Software Engineer Intern, Enterprise Santa Clara, CA
- Implemented new backend features to the EGX Platform for accelerated computing and NVIDIA-Certified Systems using **Bash**, **Python** and **MongoDB**
- Integrated a recommendation engine into a user-facing chat application using **Python** and **NVIDIA Jarvis**

University of Pittsburgh 01/2021 – 04/2021
Machine Learning Research Assistant Pittsburgh, PA
- Explored Multimodal Embeddings in the context of image-text data to achieve weakly supervised learning using **PyTorch**
- Used Discourse Relations on captions to enhance understanding of corresponding visual data

University of Pittsburgh 08/2020 – 04/2021
Teaching Assistant Pittsburgh, PA
- Preparing course material and instructing a weekly cohort of students for Intermediate Programming in Java

University of Pittsburgh 05/2020 – 08/2020
Software Developer Pittsburgh, PA
- Eliminated redundant work hours by creating a QR code generation tool using **JavaScript** and **HTML** that was used to categorize biological samples in bulk
- Improved dynamic data collection and automated weekly report generation in Tableau

SKILLS

Languages
Python, Java, C, Bash, MIPS, x86, JavaScript, HTML

Machine Learning Libraries
PyTorch, TensorFlow, Keras, scikit-learn, Natural Language Toolkit, pandas, numpy, matplotlib

Tools/Frameworks
Kubernetes, Docker, Git, MongoDB, FastAPI, Google Cloud Platform

PROJECTS

Twitter, COVID and Mental Health
- Productionalized 2 binary text classification models and a sentiment analysis model on Google Cloud Platform using **Python** and **Flask** and marked tweets as politically biased and COVID-biased

Custom Neural Network
- Designed a low-level infrastructure in **Python** that creates customizable Neural Networks for any classification task
- Backpropagation and stochastic gradient descent were used to minimize loss

CalBot
- Created a **Python** bot that delivered reminders to 250+ people using the GroupMe API after scraping a course calendar