ANISHA JAIN

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EDUCATION

Carnegie Mellon University *Pittsburgh, PA*
Master of Science in Computer Vision *Dec 2024*
Relevant Coursework: Advanced Computer Vision, Mathematical fundamentals for Robotics, Intro. to Machine Learning

National Institute of Technology (NIT), Warangal *Warangal, India*
Bachelor of Technology, Computer Science and Engineering - GPA 9.06/10 *May 2021*
Institute Merit Scholarship Recipient (for all academic years)

EXPERIENCE

Microsoft *Hyderabad, India*
Software Engineer, Microsoft Defender for Office (MDO) *June 2021 - July 2023*
- Reduced the ML model iteration cycle for mail flow spam/phish detection from a month to less than 2 hours
- Orchestrated a nimble feature extraction approach harmoniously embedded within model inputs
- Pioneered an end-to-end process for appraising the impact of novel features on model performance within Apache Spark, seamlessly incorporating .NET runtime functionalities through .NET for Spark integration

Software Engineer Intern, Microsoft Teams Mobile *May 2020 - July 2020*
- Integrated capability for offline read flow in Android Teams app for enhanced user experience and productivity
- Implemented LRU cache eviction mechanisms utilizing Android's inherent storage techniques of disk cache and shared preferences

Software Engineer Intern, The Garage *May 2019 - July 2019*
- Enhanced employee context switching efficiency by 70% through the design of an Intranet app within Microsoft Teams, underpinned by machine learning techniques
- Engineered sophisticated AI-driven bots using the Microsoft Bot Framework, seamlessly incorporating adaptive cards and messaging extensions to elevate the app's interactivity and responsiveness

Indian Institute of Science (IISc), Bengaluru *Bengaluru, India*
Research Intern *May 2018 - June 2019*
(Advised by Dr Amarjot Singh, Founder & CEO, SkyLark Labs, and Dr Onkar, IISc)
- Performed data augmentation and processing for dataset curation from 2400 odd shot videos
- Employed an enhanced Part Affinity Field (PAF) technique within a dropout-regularized 3D-ResNet model to elevate the precision of obscured gait-centric gender classification for human subjects

PUBLICATIONS

A. Singh, A. Kumar and A. Jain, "*Bayesian Gait-Based Gender Identification (BGGI) Network on Individuals Wearing Loosely Fitted Clothing*," 2019 IEEE/CVF International Conference on Computer Vision Workshop (ICCVW), Seoul, Korea (South), 2019, pp. 1828-1835, doi: 10.1109/ICCVW.2019.00227.

SKILLS

Programming Languages – C, C++, C#, Java, Python
Frameworks – Pytorch, Tensorflow, Numpy, Pandas, OpenCV, .NET, Spark, Pillow, Tesseract, Apache PySpark
Tools – Git, Docker, Blender, Android

PROJECTS

Lunar Lander Simulation *Independent Study | May 2023*
- Accomplished autonomous lunar rover landing leveraging Deep Q-Network with epsilon-greedy policy exploration in OpenAI's Gym Library environment
- Integrated a target network for stabilizing learning and enhanced the model's convergence using experience replay

Image Segmentation of Handwritten Digits *Independent Study | April 2023*
- Constructed and fine tuned a convolutional neural network from scratch to classify handwritten digits from MNIST dataset, achieved 94% accuracy

Software Product Sprint (program for a selected 150 students from APAC region) *Google APAC | July 2020*
- Developed a web application utilizing the Collaborative Filtering algorithm to craft binge-watch lists, submit reviews, and receive personalized recommendations from an assortment of movies, web shows, and books