Anisha Jain

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EDUCATION

Carnegie Mellon University - School of Computer Science *Pittsburgh, PA*
*Master of Science in Computer Vision (MSCV) - GPA **4.22**/4* *Dec 2024*
Relevant Coursework: Learning for 3D Vision, Visual Learning and Recognition, Robot 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

Meta Reality Labs *Pittsburgh, PA*
Research Collaborator *Jan 2023 - Present*
(Advisor: Prof Laszlo A. Jeni, CUBE Lab & Michael Zollhoefer, Meta Reality Labs)
- Working on real-time dynamic scene reconstruction focusing on non-rigidly deforming scenes captured by RGBD sensors

Microsoft (R&D) Pvt Ltd. *Hyderabad, India*
Software Engineer *Jun 2021 - Jul 2023*
- Slashed ML model iteration for spam/phish detection from a *month to under 2 hours*, boosting threat response
- Streamlined feature extraction, optimizing analysis of *10 billion emails daily* for a more efficient email filter
- Innovated end-to-end process for assessing novel features' impact on model performance in *Apache Spark*

Software Engineer Intern *May 2020 - Jul 2020*
- Elevated accessibility during *offline usage in Android Teams app*, elevating user experience and productivity
- Implemented a robust cache eviction mechanism, optimizing offline read flow for varied network call latencies
- Conducted a Progressive Web App (PWA) proof of concept, further enhancing app's offline capabilities

Software Engineer Intern *May 2019 - Jul 2019*
- Drove a 70% increase in employee efficiency by developing an Intranet app on Teams minimizing context-switch time
- Revolutionized interactivity through creation of AI bots with adaptive cards and messaging extensions

Google APAC *Remote*
Software Product Sprint *Jul 2020 - Sep 2020*
- Collaborated with a team of 4 to design, develop and launch a movie and book recommendation engine
- Applied a *matrix factorization model* with collaborative filtering and content embedding for effective training

Indian Institute of Science - Computational Intelligence Lab *Bengaluru, India*
Research Intern *May 2018 - Jun 2019*
(Advisor: Dr Amarjot Singh, Founder & CEO, SkyLark Labs, & Dr Onkar, IISc)
- Achieved an *87.8% accuracy* in *detecting suspicious activities* by implementing SH-PAF Network to estimate pose for humans, whose output is further fed to 3D ResNext to captures the motion of an individual
- *Addressed critical research gap* by curating dataset of 2400+ videos of individuals in loosely fitted attire
- Co-authored and *published* a research paper (mentioned below)

PUBLICATIONS

A**. Jain**, A. Kumar and A. Singh, "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 – Python, C, C++, C#, Java
Frameworks – Numpy, Pandas, PyTorch, TensorFlow, OpenCV, Pillow, Tesseract, .NET, Spark, Apache PySpark
Tools – CUDA, Git, Docker, Linux, Blender, Android

PROJECTS

Unsupervised Reinforcement Learning across multiple environments [arXiv**]** *Oct 2023*
- Boosted exploration efficiency by 40% by integrating curiosity-driven exploration and visitation entropy objectives, enhancing RL agent versatility
- Experimentation showcased a 20% faster training and 15% improved convergence, ensuring rapid adaptation in dynamic environment

Photo that comes to life [Code**]** *Sep 2023*
- Elevated user engagement by revolutionizing video content through real-time augmented reality, utilizing ORB and FLANN algorithms
- Maximized rendering speed to a seamless 60fps via efficient parallelization, delivering an immersive user experience