NIMISHA MITTAL

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EDUCATION

University Of Southern California, Los Angeles	Jan 2022-Dec 2023
Master of Science in Computer Science (Artificial Intelligence Specialization)	
Worked as Student Worker at School of Pharmacy	
Guru Gobind Singh Indraprastha University - Maharaja Agrasen Institute of Technology, New Delhi	Aug 2017-July2021
Bachelor of Technology, Computer Science and Engineering	
EXPERIENCE	
Inferigence Quotient LLP, Computer Vision Intern	July 2021-Oct 2021
Developed several vision-based algorithms for aerial image mosaic with OpenCV modules	
MAIT R&D Department, Undergraduate Researcher	Oct 2019-July 2021
• Directed several research projects under supervision of Dr. Deepak Gupta and Ms. Prerna Sharma	
DataPitcher, Project Intern	Jan 2020-Nov 2020
• Designed data sourcing application for data collection and research purpose for different companies	
DRDO (Centre for Artificial Intelligence and Robotics), Summer Project Intern	June 2019-July 2019
Created Document Optimization Management System using Information Retrieval	
One Card Solution Pvt. Ltd. Delhi, Junior Software Developer	May 2018-Feb 2019

PUBLICATIONS

Conceptualized various Android Applications for clients

- Bachelor Thesis Project, "Medical CodeMixed VQA", under supervision of Prof. Deepak Gupta and Prof. Shad Akhtar, IIITD
- Waheed, A., Goyal, M., Mittal, N., Gupta, D., Khanna, A., & Sharma, M. (2021). BloomNet: A Robust Transformer based model for Bloom's Learning Outcome Classification. ICNLSP
- Mittal, N., Singh, P.P., & Sharma, P. (2021). Intelligent Waste Management for Smart Cities. accepted at 4th International Conference on on Industrial Electronic Research and Applications (ICIERA 2021)
- Mittal, N., Singh, P.P., & Sharma, P. (2021). Generative Adversarial Networks based PCG for games: A comprehensive study. Deep Learning in Gaming and Animations: Principles and Applications
- Waheed, A., Goyal, M., Mittal, N., & Gupta, D.K. (2021). Domain Controlled Title Generation with Human Evaluation. Advances in Intelligent Systems and Computing, Springer
- Sharma, P., Sharma, M., Gupta, D., & **Mittal, N.** (2021). Detection of white blood cells using optimized qGWO. Intell. Decis. Technol., 15, 141-149

PROJECTS

Smart India Hackathon 2020 (Ministry of Human Resource & Development, Government of India), Team Leader (Team size: 6)

• Scalable gamified incentive-based smart-tech bins to promote Swachh Bharat & Digital India mission

Smart India Hackathon 2019 (Ministry of AYUSH, Government of India), Team Leader (Team size: 6)

 Multilevel architecture-based Android app and Web portal to help Ministry automate process of collection of ASU related data along with movement at respective centers

Creating Panoramas

• Implemented basic concepts elaborated in "Multi-Image Matching using Multi-Scale Oriented Patches" by Brown et. al and some additional features

Image Morphing

• Created video and caricatures of morphed images using affine transformation, warping, etc

Image-to-Image Translation

• Implemented mean and Probability Density Function as two methods to transfer style of images ("N-Dimensional Probability Density Function Transfer and its Application to Color Transfer", ICCV-2005)

TECHNICAL SKILLS

Programming Languages: Python, MATLAB, C++, HTML, JavaScript, Bootstrap, MEAN stack (Web development) Database Technologies: MS-SQL Server, MySQL, PostgreSQL

Skills: Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Scikit, Image Processing, Tableau, Android

HONORS & AWARDS

- Smart India Hackathon 2020 Software Edition: 1st position at National Level; Dr. B R Ambedkar Institute of Technology
- Smart India Hackathon 2019 Software Edition: 1st position at National Level in for a project under Ministry of AYUSH
- Appathon 2019: Team Leader, 3rd position at Inter College Level in at IP College, Delhi University
- Completed Senior Diploma (4th year) in Indian Classical Dance, KATHAK (2021)

LEADERSHIP & INVOLVEMENT

- Participated in NASA SUITS Challenge 2022
- Attended 5th Summer School on Artificial Intelligence organized at IIIT Hyderabad
- Managed ICITETM 2020, an international conference held at MAIT as Student Committee Member
- Volunteered event conducted by Australian Motivational Speaker and the Greatest Story Shower, 'SAM CAWTHORN', March 2019
- Led team of 4 in HackOverflow 3.0, HackIIITD 2019 and NASA Space App Challenge 2018