

# ABHISHEK TANDON

☎ +1-412-785-5425 ✉ [atandon2@andrew.cmu.edu](mailto:atandon2@andrew.cmu.edu)  [linkedin.com/in/abhishektnd](https://www.linkedin.com/in/abhishektnd)  [github.com/Tandon-A](https://github.com/Tandon-A)

## Education

**Carnegie Mellon University - School of Computer Science** **Pittsburgh, PA**  
Master of Science in Computer Vision (MSCV) Dec 2023

**Birla Institute of Technology and Science, Pilani** **Pilani, India**  
Bachelor of Engineering (Hons.) in Mechanical Engineering | CGPA: 8.55/10.0 Jul 2018  
*Elective Coursework:* Machine Learning, Data Structures & Algorithms, Object Oriented Programming

## Skills

**Languages:** Python, Java, C++, SQL

**Toolkits:** PyTorch, TensorFlow, Triton Inference Server, Scikit-Learn, OpenCV, Git, Docker

## Professional Experience

**Nayan** (*CV platform to provide hyperlocal visual search*) **Feb 2021 – Jun 2022**  
AI Software Engineer Delhi, India

- Designed AI platform to detect insights from videos for multiple problem verticals. Integrated crowd-sourcing methods to ensure continuous & automated improvement of the system. **US Patent 17/587,467** (Pending)
- Engineered complex multi-model combinations to detect traffic violations. Utilized Triton Inference Server for model serving & management, resulting in detection of more than 5000 violations each month.
- Built Python pipelines to enable automated AI model retraining, versioning, A/B testing, and model format conversion, saving the manual effort of training processes and scaling model deliveries.

**Oracle** **Jul 2018 – Oct 2019**  
Applications Engineer Bangalore, India

- Developed Slack app using Oracle Service Bus to facilitate sales operations. Built a usage monitoring tool for the Slack app, providing key metrics validating increased employee engagement.

**Intel Corporation** **Jul 2017 – Dec 2017**  
Machine Learning Intern Bangalore, India

- Trained ML models to predict multiple laptop usage modes with more than 90% accuracy. Deployed models in C# application, enabling different thermal strategies based on usage modes, improving the user experience.

## Research Experience

**Computer Vision Center (CVC, UAB)** **Oct 2019 – Dec 2020**  
Visiting Researcher | ADAS group | Supervised by [Dr. Antonio Lopez](#) Barcelona, Spain

- Researched 2D domain adaptation and 3D shape completion techniques, developing 3D Generative Adversarial Networks (GANs) solving for synthetic-to-real domain transfer problem on 3D point cloud data.

## Projects

**Emotions in Context : Emotic** | [\[Code\]](#) **Apr 2020 – Jun 2020**

- Implemented Emotic methodology to recognize emotions in natural settings by using scene context and target person features. Trained two-stream models using PyTorch, achieving 26 mAP over the Emotic dataset.

**CycleGAN SSIM** | [\[Code\]](#) | [\[Project Blog\]](#) **Apr 2018 – Jun 2018**

- Qualitatively improved results of CycleGAN by training model with structural-similarity index (SSIM) based loss functions as the cyclic loss for the painting-photo transfer problem.

## Honors & Awards

- Awarded the QS World Merit Academic Excellence Scholarship May 2022
- Selected as a section leader for the Stanford University's Code in Place initiative to lead weekly sessions teaching Python to a global pool of students May 2021