### ABHISHEK TANDON

## Skill Set

Python, Java, C++, PyTorch, TensorFlow, OpenCV, Docker, Kubernetes

# Professional Experience

### Nayan Tech | AI Software Engineer | Delhi, India

Feb 2021 - Present

- Integrated multiprocessing in AI inference docker containers resulting in a 4x speedup.
- Developed benchmarking modules for deployment containers, calculating compute usage and business KPIs, enabling easy comparison between model versions and code changes.

#### Oracle | Applications Engineer | Bangalore, India

July 2018 - Sept 2019

• Integrated Oracle sales platform with Slack app to facilitate business operations. Built a usage monitoring tool for the Slack app, providing key metrics validating increased employee-customer engagement.

## Intel Corporation | Machine Learning Intern | Bangalore, India

July 2017 - Dec 2017

• Intelligent Thermals: Engineered and deployed an ML solution achieving greater than 90% accuracy to predict multiple laptop usage modes. Employed thermal strategies for the modes, improving the user experience.

# Research Experience

Computer Vision Center | Visiting Researcher - ADAS group | UAB, Spain

Oct 2019 – Jan 2021

- Boosted cross-domain results of 3D object detectors up to 10% mIOU by using a heuristic margin approach.
- Developed novel Generative Adversarial Networks to adapt synthetic 3D point cloud data to the real domain.

# **Projects**

### Emotions in Context : Emotic | [Code]

Apr 2020 – June 2020

• Implemented Emotic methodology of recognizing emotions in images, utilizing target person features and background context. Trained CNN model using PyTorch achieving 26 mAP over the Emotic dataset.

#### CycleGAN SSIM | [Code] | [Project Blog]

Apr 2018 - June 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.

#### Quality Control Using Deep Learning | [Code]

Jan 2018 - May 2018

• Developed a Convolutional Neural Network (CNN) pipeline to differentiate defect products from defect-free products. Trained the models on DAGM database, achieving more than 90% accuracy.

#### Education

### Bachelor of Engineering (Hons.) in Mechanical Engineering

2014 - 2018

Birla Institute of Technology and Science, Pilani — CGPA: 8.55/10.0

Pilani, India

Coursework: Machine Learning, Data Structures & Algorithms, Object Oriented Programming

## All India Senior School Certificate Examination (AISSCE)

2013 - 2014

Amity International School, Mayur Vihar — Percentage: 94.6%

Delhi, India

#### Honors and Awards

- Selected as a section leader for the Stanford Code in Place 2021 initiative.
- Awarded a full scholarship to pursue Udacity's Computer Vision Nanodegree as a Facebook Udacity AI Scholar for successfully completing the 'Secure and Private AI' challenge (top 300 from 14000 applicants).
- Awarded the Menezes Technology Scholarship by Victor Menezes foundation for academic excellence in AISSCE, provided to pursue four-year undergraduate engineering studies.
- Achieved 100% in All India Computer Science Examination. Recipient of appreciation letter from former Human Resource Development Minister of India for outstanding performance.