ANANYE PANDEY

ap3885@columbia.edu | (347) 276 7609 | https://www.linkedin.com/in/ananyepandey/ | ap3885.github.io

EDUCATION

- **Columbia University** — Aug 2019 – Dec 2020
  MS in Electrical Engineering — **New York, NY**
  GPA: 3.59/4
- **Manipal Institute of Technology** — Aug 2014 – Jul 2018
  BTech in Electronics and Communication Engineering — **Manipal, KA, India**
  (*Minor Specialization in Signal Processing*) — CGPA: 9.04/10

PROFESSIONAL EXPERIENCE

- **Columbia University** — **New York, NY**
  Research Assistant — Jun 2020 – Aug 2020
  - Implemented various Deep Learning models and inference machines on TensorFlow, PyTorch and TensorRT for object detection in real time through IoT.
  - Determined backend, software and best detection model based on profiling the inference machines upon deployment.
- **OSRAM Opto Semiconductors** — **Regensburg, DE**
  Process Development Engineer — Aug 2018 – Jul 2019
  - Improved production efficiency of "Laser Diode Testing System" by 8% using MATLAB and Python for optimization of laser far-field imaging system using Machine Learning in the production line.
  - Supervised new laser diode production and development.
- **OSRAM Opto Semiconductors** — **Regensburg, DE**
  Student Intern — Mar 2018 – Jul 2018
  - Developed a system to test laser diodes at high currents for production and implemented this system in the production line.

SELECTED PROJECTS

- **Street View Number Recognition** — **Columbia University**
  - Developed a modified Convolutional Neural Network (CNN) on Python to detect house numbers from street view images using TensorFlow on Python.
  - Prediction results at 92.46% was just slightly greater than the human average.
- **ICU Mortality Prediction** — **2020**
  - Used the result of stacking various Machine Learning algorithms like Logistic Regression, Clustering, Random Forests and SVMs in Python to predict multi-hospital ICU mortality rates within the first 24 hours of admission.
  - Secured an international top 20% with a test prediction accuracy of 90.6%
- **Parallel implementation of Principal Component Analysis** — **Columbia University**
  - Implemented CUDA kernels to calculate the Eigenvalues and Eigenvectors of the covariance matrix of any dataset using the Jacobi rotation method using CUDA and Python.

SKILLS AND CERTIFICATIONS

- Python, MicroPython, C/C++, SQL, CUDA, OpenCL, OpenCV, MATLAB, TensorFlow, PyTorch, TensorRT, DeepStream**,** Solidity, LabVIEW, R

ACTIVITIES AND AWARDS

- Played for and led the Manipal soccer team at a national level.
- Was part of the organizing team of college festivals and concerts