ANANYE PANDEY

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

EDUCATION

- **Columbia University**   **New York, NY**
  MS in Electrical Engineering   Aug 2019 – Dec 2020
  GPA: 3.57/4
  Select coursework: Machine and Deep Learning, Parallel Computing, Bayesian learning, Blockchain
- **Manipal Institute of Technology**   **Manipal, KA, India**
  BTech in Electronics and Communication Engineering   Aug 2014 – Aug 2018
  CGPA: 9.04/10
  Select coursework: Advanced Digital Signal Processing, Image and Speech Processing

SKILLS AND CERTIFICATIONS

- **Programming:** Python, R, C/C++, Java, SQL, CUDA, OpenCL, MATLAB, Solidity, LabVIEW
- **Platforms and Packages**: OpenCV, TensorFlow, PyTorch, TensorRT, DeepStream, Google Cloud Service, AWS, Pandas, Scikit-learn, Git

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

- **IOT Connected Smart Lock System**   **Columbia University**
  ➢ Developed an embedded Internet-of-Things connected lock system using C and MicroPython, controlled by a smartphone app through voice commands, to provide main-door security and convenient control over appliances in the house.
- **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.