



Akash Gupta

B. Tech – Electronics and Communication Engineering – IIT, Dhanbad



20JE0082 +91-7355987585 @gakash2001@gmail.com LinkedIn: <https://www.linkedin.com/in/gakash2001>

EXPERIENCE

UiT – The Arctic University of Norway — Research Intern

July 2022 – Present

Developing novel training pipelines for CNN and vision transformers for handling very large images under resource budget constraints.

TransmuteAI — Deep Learning Intern

May 2022 – Present

Literature review of various code modularization techniques, code modularization and combining the power of various ways of Binarization, Pruning, Distillation and Quantization for an upcoming open-source tool.

CyberLabs, IIT-ISM — Member

July 2021 – Present

The official tech club of IIT-ISM, where we read research papers, complete the standard machine learning courses, participate in kaggle contests and various hackathons together.

PROJECTS

UltraMNIST Classification Benchmark

February 2022 – June 2022

- Played a key role in the creation of the UltraMNIST dataset.
- Developed multiple baselines for the standard and budget-aware benchmark.
- Co-authored a research paper.

Systematic Benchmarking of Quantization methods in Deep Learning

May 2022 – Present

- Co-developing quantization models for an open-source project on bench-marking of model compression methods.
- Scientific literature review, implementation of quantization methods and running experiments for an upcoming scientific paper.

Bosch's Age and Gender Prediction

- Made Age and Gender prediction model using pytorch for InterIIT 2022.

Code: https://github.com/gakash2k01/Bosch_AG-Prediction

Bot for Flipkart Grid 3.0

June 2021 – February 2022

- Created and automated a set of four bots for the challenge with my knowledge of openCV and algorithm

Code: https://github.com/gakash2k01/Flipkart-GRID_3.0

PUBLICATIONS

UltraMNIST Classification: A Benchmark to Train CNNs for Very Large Images

D. Gupta, U. Bamba, A. Thakur, **A. Gupta**, S. Sharan, E. Demir, D.K. Prasad

Paper Link: <https://arxiv.org/abs/2206.12681>

[NeurIPS 2022 Datasets and Benchmarks (Submitted)]

KAGGLE

Active participation in Kaggle Days, Vision-Verse, Image-Classification - 2, UltraMNIST Classification challenge, Happy Whale: Whale and Dolphin Identification, 30 Days of ML, PetFinder.my: PetPawpularity Contest etc.

EDUCATION

Indian Institute of Technology (ISM), Dhanbad — Bachelor of Technology in Electronics and Communication Engineering

NOV 2020 – PRESENT CGPA – 6.69

Base PU College, Bangalore 12th - 85%

St. Basil's School, Basti 10th - 94%

SKILLS

- **Programming** : C/C++, Python, Matlab, GNU Octave
- **Machine Learning** : Pytorch, Tensorflow, OpenCV
- **Web Development** : HTML

ACADEMIC ACHIEVEMENTS

- **JEE Advanced 2020** : AIR 4498
- **JEE Mains** : 99 percentile
- **BitSat score** : 366/450

POSITIONS OF RESPONSIBILITY

- Python Programming Mentor at Being Artifex Skillathon
- Cyberlabs Machine Learning member.

COURSES & CERTIFICATES

- Machine Learning course by Andrew NG
- Deep Learning courses by deeplearning.ai
- CS231n offered by Stanford University