ABHIJIT DEO

Highly motivated Python developer with knack of Open source development

EDUCATION

Birla Institute Of Technology and Science, Goa *2019-2023*
B.E Electronics and Instrumentation
Graduated with 7.5 CGPA

Pace Junior Science College, Dadar,Mumbai *2017-2019*
Higher Secondary Certification
85% in Board Examination and 8057 All India Rank in JEE ADVANCED

EXPERIENCE

Minus Zero *April 2024 - Current*
SDE+MLE

- working with SDE and MLE team, everything related to Data Pipelines and Inference.

AIRA Matrix *July 2023 - March 2023*
AI Engineer

- Worked on Image classification and segmentation of Prostate Cancer and used Multiple MIL strategies to train classification models for histopathology images.
- Wrote Optimised Multi-threaded code for Tiling and Inference, reducing the time by 70%. On the Inference side, experimented with torch compile and ONNX to speed up the inference.
- Worked with the Data science team on survival prediction of cancer patients from TCGA-Liver Cohort.

SAMSUNG Research Institute, Banglore *July 2022 - Current*
Research Intern

- This was part of PS-2 program at BITS
- Working on Multi-Intent Classification with the Voice Intelligence team
- Built a pipeline for data cleaning, processing, training, and evaluation of models suitable to Bixby system.

Government Of Goa *June 2021-Aug 2021*
Data Science Intern, Remote

- This was part of PS-1 program at BITS.
- Performed Exploratory Data Analysis of Agricultural data and farmers data; Tools used:Numpy, Pandas.

RESEARCH

Bayesian Deep Learning *Jan 2022 - May 2022*
Study Oriented Project *Code*

- Worked on Bayesian Graph Neural Networks and Generative tasks as an undergrad researcher at APPCAIR
- Implemented Bayesian Graph Neural Networks from Scratch

PROJECTS AND OPEN SOURCE CONTRIBUTION

TorchVision
Contributor *Contributions*

- Contributed to PyTorchs Computer Vision library by integrating Stanford Cars Dataset with its dataloader V2 prototype
- Added Complete IOU loss function, and vectorized BoxEncoding and Boxdecoding of FCOS models. For more details, please click on contributions.

Vformer *Oct 2021-Present*
Lead Contributor *Code*

- Contains implementations of prominent ViT architectures broken down into modular components.
- Contributed to the library by implementing Vision Transformer Models like Swin Transformer, Pyramid Vision Transformer, Compact Transformer etc.
- Library package has more than 5k downloads and 150+ stars on Github

TECHNICAL SKILLS

Programming Languages	Python, C/C++, Matlab
Frameworks	PyTorch, NumPy, Keras, TensorFlow, Pandas
Tools and Platforms	Git/GitHub, Docker, GCP

OTHER ACTIVITIES

Member
Society for Artificial Intelligence and Deep Learning

- Involved in reading and discussion sessions on artificial intelligence research
- Conducted a course on Introductory on Python and Machine Learning with CTE

RELEVANT COURSE-WORK

University	Digital Image Processing, Natural Language Processing, Optimization, Reading Course on Generative Adversarial Networks (GANs), Object-Oriented Programming, Meta Learning[1]
Online	GANs Specialization (Coursera), TensorFlow Developer Certification (Udemy)

[1] Auditing