Anirudh Prabhakaran

Mail - LinkedIn - GitHub - Twitter - Instagram

Education

- **National Institute of Technology Karnataka, Surathkal** December 2020 - May 2024 *(Expected)*
  Bachelor of Technology *Major CGPA: 9.13*
  Major: Electronics and Communication Engineering, Minor: Computer Science
- **Sardar Patel Vidyalaya, New Delhi** 2020
  XII - CBSE *XII: 97.80%*

Experience

- **Research Internship** February 2023 - Present
  Under the guidance of Dr. Jeny Rajan, Dept. of CSE, NITK
  - Started working on a project on Multilabel Classification of Hemorrhage Subclasses
  - Tech Stack: Pandas, NumPy, PyTorch
- **Google Summer of Code (GSoC) Contributor** June 2022 - August 2022
  Public Lab
  - Worked on deprecating legacy code to improve the performance of the application.
  - Reduced a few DB query times to 50%, for a userbase of 500k+ users.
  - Tech Stack: Ruby on Rails, React, MySQL
- **Machine Learning Intern** May 2022 - June 2022
  Fourth Frontier
  - Worked on creating a new model based on a research paper that aims to determine cardiac age from ECG signals in real-time.
  - Several models, including ResNet-18, were repurposed for linear regression problems based on ECG data.
  - Tech Stack: Python, PyTorch, Jupyter
- **Software Engineering Intern** February 2022 - April 2022
  AI4Bharat
  - Created a data accumulation and annotation platform, **Shoonya**, used by language experts to collect data on Indian languages.
  - Used by around 100 annotators since April 2022, with 120k tasks completed over 24 Indian languages and 3 project types.
  - Tech Stack: Python, Django, React, PostgreSQL
- **IRIS Labs Secretary** March 2021 - Present
  IRIS, NITK
  - IRIS is the student-led ERP developed for automating all administrative and academic activities. User base of around 19k users
  - Working on Urja (IoT) - a mobile app to facilitate the usage of the e-vehicle charging station installed in NITK.
  - Working on Gyan Summarisation (ML) - consolidating advice for placement season from seniors' reports.
  - Contributed to developing various modules like Hostel and Mess Allotment, Academic Certificates, Career Development Center and Alumni Connect, and the maintenance of many other modules.

Projects

- **Optic Disc Segmentation and Glaucoma Detection:** A project to first segment the optic disc from various retinal fundus images, then classify these segmented images into glaucomic and non-glaucomic images. Models like U-Net were used for segmentation; custom CNN, AlexNet and ResNet were used for classification.

  Lung Disease Detection: A project to detect lung diseases in patients using chest x-rays through deep learning techniques, more specifically, falls under medical imaging. Multiple models, like AlexNet, VGG16 and ResNets, were used.

Technical Skills

- Python, SQL, Flask, TensorFlow, Scikit-Learn, PyTorch, Keras, React, Golang, Docker, ELK Stack, Django, Ruby on Rails

Club Activities

- **Treasurer, IEEE-NITK**
- Mentored 13 students in field of Machine Learning and Web Development as part of IEEE Mentorship Programs