Partha Sarathi Purkayastha

Room 2110, Shankar Bhawan – BITS Pilani – Pilani, India

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☖ Banana padega

Third year undergraduate at BITS Pilani pursuing a major in Computer Science and Engineering (Hons.), applying for the position of Research Assistant in Computer Science.

Education

Bachelor of Engineering(Hons.)	9.86/10.0
Computer Science and Engineering, BITS Pilani	*2020-24*
All India Senior School Certificate Examination (Class XII)	97.20%
South Point School, Guwahati (CBSE)	*2019*
All India Secondary School Examination (Class X)	10.0/10.0
South Point School, Guwahati (CBSE)	*2017*

Key Courses Taken

Computer Science

Data Structures and Algorithms, Database Systems, Object Oriented Programming, Computer Programming, Logic in Computer Science, Discrete Structures in Computer Science, Microprocessors and Interfacing, Digital Design

Mathematics & Other Courses

Linear Algerba, Probability and Statistics, Calculus, Differential Equations, General Biology, Principles of Economics, Techniques in Social Research, Technical Report Writing

Additional Courses Undertaken

Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning by **DeepLearning.AI**, AI for Medical Diagnosis by **DeepLearning.AI**, **Amazon** ML Summer School 2022

Scholastic Achievements

- Awarded **BITS Merit Scholarship(100%)** for being among the Top 1% of students in the year 2020
- Secured **All India Rank 3300** in JEE Advanced 2020 among **150,000** candidates
- Secured **99.7** percentile in JEE Main 2020 among **1.1 million** candidates
- Secured **All India Rank 6040** in NEET 2020 among **1.36 million** candidates
- Secured **403/450** marks in BITSAT 2020
- Secured **Rank 1** in Assam CEE 2020

Technical Strengths

- **Programming Languages:** C/C++, Python, Java
- **Development:** HTML, CSS, Node JS, React JS, MySQL, Scikit, Numpy
- **Others:** LaTeX, Git, GitHub, Postman

Work Experience

Object Detection Model
Guide: Nikhil Singh, Jio Platforms Ltd.   *May 2022- Jul 2022*
- Created a **bounding box dataset** by downloading google images in single shot and automated the process of data selection
  - Used **numpy, matplotlib and colab_utils** libraries
  - Used Roboflow for the Annotation process and to export in the required format.

Key Academic Projects

Object Detection Model
Guide: Nikhil Singh, Jio Platforms Ltd.   *Jun 2022- Jul 2022*
- Trained an Object Detection Model based on the latest model **Yolov7** within a confidence of **35%**.
- Used **sklearn, numpy, tensorflow, PIL and matplotlib** libraries.
- Model could detect relevant objects with a confidence of **80+%**.

DNS Visualizer
Guide: Dr. Amit Dua, Computer Science Department, BITS Pilani   *Mar 2022- Apr 2022*
- Developed a **full-stack website** for the visualization of the **DNSSEC** authentication chain
- Implemented using a **relational SQL database**
- Server side and Client side developed using **Node JS** and React JS respectively.

Fake News Detection Model
Guide: Dr. Tanu Shukla, Department of Humanities & Social Sciences, BITS Pilani   *Oct 2021-Jan 2021*
- Trained **Bi-LSTM, LSTM and Ensemble Learning** Models to detect fake news
- Used **Accuracy, F1-score, Precision, Recall,** and **Specificity** to compare performances
- Achieved **90+%** using Memory-based models on all parameters

Extra-Curricular Activities

Publicity-Coordinator
*North-East Cultural Association: **Arunodoi***   *Feb 2022-Apr 2022*
Video-editor for promotion of the cultural groups belonging to the Association, and also represented the Association on Founders' Days 2022 Event at BITS Pilani.

Student Volunteer
Indian Red Cross Society   *Mar 2022*
Volunteered for the execution of a two-day long Blood Donation Camp with a footfall of 3000+ and 800+ Blood Donations.

Teaching Assistant
Youngenius Eduventure Pvt Ltd   *Nov 2020- Feb 2021*
Prepared materials to help students for JEE Mains/JEE Advanced/NEET in the subjects of Physics, Chemistry and Mathematics.

Langauges Known

English, Hindi, Malayalam, Bengali