





Sparsh Dutta

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Education

Indian Institute of Technology, Guwahati

2017-2021

Btech - Mechanical Engineering & Minor in Computer Science 8.59 CGPA

Responsibilities: Chief Organiser and Online Head of Technothon 2019 (International exam), Robotics Core Team Member and External Relations Head, 2019

Experience

JP Morgan and Chase Co.

Software Development Engineer

July 2021–Present

- Designed a set of micro-services using a firm-specific framework and Flask responsible for handling Kafka events and seamless data delivery.
- Optimized the services by 78% by incorporating a Caching mechanism.
- Worked on deploying the application using Kubernetes and creating Docker image with delivering the first phase of the application in advance.

JP Morgan and Chase Co.

Software Development Intern

Jun 2020–July 2020

- Developed a Web-App and API for translation of Indian Sign Language to text and vice versa.
- Developed a Sign Language Gesture recognition and translation to meaningful sentences using CNN with an accuracy of 95.6%.
- Translation of Text to Gesture Animation using HamNoSys Encoding with zero latency

Prof. Frank Rhee, Hanyang University, Republic of Korea

Computational Vision Intern

May 2019–July 2019

- Improved Data Clustering with an accuracy of 97% using Secondary Information Granules over Fuzzy C-Means
- Developed and designed a new algorithm for efficient 1-D Clustering in MATLAB.

Projects

Raman: The Humanoid Bot

Apr 2019–Dec 2020

4I Labs, IIT Guwahati

[Github](#)

- Worked on implementing Object Detection and Tracking in the Humanoid using *MobileNet* and *CSRF Tracker* with an accuracy of 92%.
- Incorporated text-to-speech and vice-versa using the *Google Speech API*

Technothon Online Platforms

Oct 2019–Oct 2020

Online Head, Technothon, 2019

[Website](#)

- Developed and maintained the the entire Back-end, front-end and the Database management system of the website using *PHP Laravel* which got 1.5 million hits during the tenure.
- Developed the first version of the Technothon App on *Flutter* and is available on *Play store*.
- Developed a live game for prediction of housing prices with only Data visualization tools for over a 100 concurrent users using *Django*.

Skills

Programming Languages: Python, C++, Javascript, Solidity*, Dart*, Java*

Frameworks: PHP Laravel, Django, Flask, Flutter*, Android*, ReactJS*

Miscellaneous: mySQL (DBMS), postgresSQL (DBMS), Keras (ML), Blockchain* (Solidity Smart Contracts), Git, Docker and Kubernetes (Deployment), Shell Scripting (Linux), MATLAB, LaTeX

* Elementary Proficiency

Key Courses

Blockchain Development in Solidity
Advanced Machine Learning (Deep Learning)
Data Structures and Algorithm
Theory of Computation

Docker and Kubernetes
Convolutional Neural Networks
Digital Logic and Computer Architecture
Theory of Computation