ANIRUDDHA CHATTOPADHYAY | 17QE30007

QUALITY ENGINEERING DESIGN AND MANUFACTURING (INDUSTRIAL ELECTRONICS VERTICAL)
(M.Tech Dual 5Y)
MICRO SPL. in OPTIMIZATION THEORY AND APPLICATIONS, INTELLIGENT LEARNING SYSTEM DESIGN, EMBEDDED CONTROL, SOFTWARE, MODELLING AND DESIGN

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2022	M.TECH Dual Degree 5Y	IIT Kharagpur	8.17 / 10
2016	Indian School Certificate	Indian School Certificate Examinations (CISCE)	97.5%
2014	Indian Certificate of Secondary Education	Indian School Certificate Examinations (CISCE)	92%

AWARDS AND ACHIEVEMENTS

•Secured an **All India Rank of 10(2016)**in ISC examination among more than 1.6 lakh candidates. Stood **3rd i**n West Bengal and **topped** my school(among more than 450 students)and **jointly topped** my district on Indian School Certificate (ISC) examination.

• Former receipient of the **Inspire Scholarship**.

• Among **top 7% in the batch** (1500 students) to be awarded a department change based on academic performance

INTERNSHIPS

HSBC Electronic Data Processing India Private Limited,Kolkata   [Jul'20-Aug'20]
Opportunity Scoping for Financial Simulations in Quantum Computer
•Predicted Stock option prices using monte carlo simulations in a Quantum Computer using Qiskit Framework
•Achieved Quadratic speed up on error convergence
•Delivered results to support cost cutting by more than **5 billion dollars**

Lubble Technologies Private Ltd   [Oct'19 - Present]
Android,django and Nodejs developer at Lubble technologies(**Remote Intern**). I am responsible for introducing and augumenting vital features to the Lubble android application. I work on the android app and backend in **Firebase and Django.** My tasks involves creating **Rest APIs ,**writing **Cloud Functions** and introducing new **Features** along with improving and optimizing existing features.

Machine Learning Engineer at StepsWatch   [June'20-July'20]
• **B**uilt a python backend in **flask** that delivers **data analysis and vizualization** to a react native front end
• **Facial recognition face masking(Gaussian Blur)** on photos and videos based on consent, built using **Dlib library.**

Kharagpur Winter Of Codes   [Dec'18-Jan'19]
Succesfully completed an Open Source project(MEDIUM GRABBER) arranged by Kharagpur Open Source Society(KOSS) under Mentor Mr.Abhishek Singh. This is a **5 week long open source mentorship program** named Kharagpur Winter of Codes(KWoC) aimed at training **students for the Google Summer of code(GSoc).**

COMPETITION/CONFERENCE

Secured 1st Position At HSBC Oncampus Hackathon on AI, 2018

•Built an intelligent medical chat-bot using **tkinter(GUI)** in python.
•Chatbot takes in the symptom of the user as input and processes that using **Natural Language Processing.**
•The processed input is then put through a **Multi layer perceptron Neural network** that maps it to a keyword(Symptom).
•The Symptom is then searched in **NEO4J graph database** and other relevant symptoms the user may have is asked as cross query to the user.
•Finally using the number of symptoms matched of a particular disease , a conclusive health report is given to the user.

1st Runners Up among 2000 teams in AI based onsite hackathon vesAlthon,2019

•Built an all in one android app for physical and mental health maintenance of elderly
•**Neural Network** Based Fall detection, **IBM watson** Chatbot, facial **Mood recognition** are some of the salient features
•Got recognized by all the **major media houses and was officially shared from the director's page.**

Finalist in More than 4 National hachakthons

• **Winner At HSBC** Hackathon on AI among more than **100 teams**
•Runners up at VESAITHON on 'AI for good' hosted by **NVIDIA** and **CAPGEMINI** among more than **2000 teams**
•Finalist in **Smart India Hackathon,**2020.
•Finalist in 'AI for Transportation' Hackathon by **NEC**, choosen among **1400 teams all over India**

PROJECTS

Air Cargo Shipment optimization under Prof. Manoj kumar Tiwari, Department Of Industrial and Systems Engineering,May 2019-July 2019

Developed an linear programming model for minimizing the cost of an air cargo shipment using concept of Integration,consolidation and deconsolidation. Solved the model using a heuristic **ant colony optimization** algorithm in python. This significantly increases the profit of the freight forwarders.

Automated the Teaching Feedback System

•Self project to automatize the teaching feedback system for more than **10000 students.**
•Used **Selenium** in python to automatize the web browser action and **Tesseract OCR** to break the captcha code.
•Achieved **4x increase** in the review fillup process

PUBLICATIONS

Analysis of the Academic Genealogy of Education,JCDL '20: Proceedings of the ACM/IEEE Joint Conference on Digital Libraries in 2020

Academic genealogy graphs (AGGs) identify the lineage of researchers and highlight the roles of mentors and academic institutions in the evolution of a discipline. In this poster, we study EduTree, the AGG of the discipline of education. We identify the major characteristics of EduTree including the main areas of research, the pioneering institutions, and the researchers with a high mentorship index.

ENTREPRENEURIAL EXPERIENCES

Co-founded a startup named SharpCookie

•Made a first of its kind academic guide book for the incoming freshers of IIT Kharagpur
•More than **1200 copies** sold
•More than 4 **lakh** in revenue earned