# Debjyoti Ghosh

## Education

## Indian Institute of Technology, Kharagpur

July 2017 - May 2022

Dual Degree (BS & MS) in Geology and Geophysics

CGPA: 8.52/10

# Work Experience

# Software Developer — Standard Chartered GBS

July 2022 - Present

- Created a Recon tool from scratch for the FMSwiftGateway project to reconcile incoming swift messages from two different systems. (Java, SpringBoot, JPA, SQL).
- As a part of Straight2Bank project team, SCB's foreign exchange trading system, implemented various regulatory requirements (Dodd Frank & MIFID-2), delivered multiple features, improved the trade execution time, fixed bugs and added test cases for various trade utility functions. (C++, Solace, SQL).
- Migrated C++ libraries for the ACR decommission project to a secondary trading system.

## Fullstack Developer Intern — Pulse Labs Pvt. Ltd.

May 2021 - July 2021

- Developing, adding features, debugging and deployment for a personalized news app Reflect App.
- Developed scheduled Push notification feature for the mobile app using Firebase cloud messaging and AWS Lambda to achieve better user engagement.
- Used Google Text-to-Speech api to create AI based Read-Aloud feature for news articles, also used geocoding api to find user's location for better news feed recommendations based on region.
- Implemented an AWS lambda function to run a recommendation (python) script triggered by a PUT request to the backend api server running on Nodejs when news feeds categories are updated.

#### Relevant Coursework

- Algorithms
- Computer Networks
- System Design & Architecture
- Probability & Statistics
- Linear Algebra in AI & ML
- Machine Learning Foundations & Applications

#### Technical Skills

Languages: C++, Typescript, Javascript, Java, Python, Go, SQL

Frameworks/Libraries: ExpressJs, ReactJs, Mongoose, SpringBoot

**Developer Tools:** Git, AWS, Docker, Kubernetes, Redis, Linux, GDB, BashScripting

# **Key Projects**

## Volunteer — Endangered Wildlife OU, Omdena AI

April 2021 - May 2021

- A Wildlife Query System which outputs population trend data for any given species and location.
- Integrated a framework of web scrapers to collect animal species data using Selenium, BeautifulSoup and Google-api-client-Discovery libraires, parsed the PDF files using pdf-miner & pytesseract.
- Used a trained domain-specific BERT QA model to fetch the top k text blocks with an accuracy 53% on real dataset. Developed a Streamlit app for the query system and deployed the entire ML pipeline on AWS EC2 instance using S3 storage for time series data.

## Algorithms Visualizer Application — Visualizer

May 2020 - June 2020

- Developed a React app for visualizing sorting and pathfinding algorithms using DOM tree manipulation.
- Implemented Bubble Sort, Insertion Sort, Merge Sort and Heap Sort for sorting and Dijkstras algorithm, Depth First Search(DFS) and Breadth First Search(BFS) for pathfinding.

## Open Source Contributions — Check here

• I contribute to various open-source projects in my spare time.