# **Debasish Das**

Leeds, United Kingdom | debasish4.das2@gmail.com | (+44) 7867-061661 | LinkedIn | Github

### WORK EXPERIENCE

Software Developer

# **Tata Consultancy Services**

Kolkata, India

Aug 2024 - Dec 2024

- Worked with cross-functional teams to update 50+ tables, with minimal downtime and zero data loss and also contributed significantly to some new modules using **Python and PostgreSQL**, enhancing system efficiency.
- Led a team of 5 developers in an Agile Scrum environment, ensuring consistent delivery of milestones. Achieved 100% on-time project completion while maintaining high-quality output.

Python Developer

May 2019 - Aug 2022

- Optimised customer account management feature for the Global Banking Platform (GBP), a prominent banking website in Switzerland, improving transaction processing speeds by 40%, which enhanced user satisfaction metrics as reflected by a 30% reduction in support inquiries.
- Engineered and built many RESTful APIs utilising **Flask** and **Django REST Framework**, enhancing data validation processes which resulted in a 70% reduction in data retrieval times across the application suite.
- Implemented database schemas and improved complex queries in PL/SQL and MySql, reducing query execution time by 25%.

Software Engineer

Sep 2016 - Apr 2019

- Spearheaded the Aviva project, a UK-based insurance application using **Java**, resulting in a 30% increase in customer acquisition and a 15% boost in policy renewals.
- Resolved critical software bugs, achieving a 95% on-time delivery rate and contributed to a 10% reduction in customer issues, ensuring enhanced client satisfaction.

### **EDUCATION**

### University of Nottingham, United Kingdom

Sep 2022 - Jul 2024

• M.S. in Computer Science (Artificial Intelligence) (2yr) (Degree: Distinction)

# Indian Institute of Technology Mandi (IITM), India

Jan 2021 - Aug 2021

• Postgraduate Certification in Applied AI and ML (Degree: Distinction)

## West Bengal University of Technology, India

Jun 2012 - Aug 2016

• B.Tech in Electronics & Communication Engineering [eq. to UK BEng] (Degree: Merit)

## PROJECT EXPERIENCE

### Collaborative Group Learning Platform

• Developed Django-based real-time group study platform for 50+ users, leveraging REST Framework to build scalable REST APIs that handle user authentication (JWT), chat history storage, and group management, ensuring seamless CRUD operations. Deployed on AWS using EC2 (compute), S3(encrypted media storage), and RDS Mysql(database).

### MCTS Retrosynthesis Tree Visualizer Integration

• Implemented an interactive Tree search visualiser for retrosynthesis pathways in AI4Green, verified by chemistry professors, and compared with existing software, it was found to be more user-friendly and informative, aiding chemists in understanding complex retrosynthesis processes and making informed synthetic route decisions.

## Othello Game Application with MCTS enhancements

• Created a PyQt-based Othello application integrating MCTS enhancements. Allowed configuration of AI settings, selection of MCTS enhancements, and Tree search visualisation of AI decision-making for an advanced and educational gameplay experience.

# MCTS TIC-TAC-TOE Game Application

• Implemented MCTS-based Tic-Tac-Toe app offering AI vs AI, human vs AI, and human vs human modes with realtime MCTS Tree search AI decision visualiser using Pygame.

## **SKILLS**

Python (Pygame, Pandas, Numpy, Multithreading, Multiprocessing), Django, Flask, Javascript, AWS, PostgreSQL, SQL, PL/SQL, RestAPI, Git/GitHub, Postman, Jira, Linux, Docker, DS/Algo, CI/CD, TDD, BDD

# AWARDS

AWS Certified Cloud Practitioner (2023), PG Certification in Applied AI and ML (2021), Accelerated Data Science Certification (IIT Kharagpur, 2020), On the Spot Award & Best Team Award, TCS (2018, 2021), Service Commitment Award, TCS (2019), Star Team Award, TCS (2017), Awarded thrice in (FOSET).