SUDESHNA RHEANNA CHATTERJEE

EXPERIENCE

Technology Consultant

ADDVERT

🛗 Jan 2022 - Present

♀ London, UK

Role

Advising on AI technology in marketing, specifically using natural language processing for survey analysis and integrating OpenAI APIs for streamlining social media content creation.

Software Engineer/Blockchain Engineer LMAX Group

m Dec 2022 - Jun 2023

♀ London, UK

Role Built a de-centralized exchange to integrate with an existing off-chain matching engine, to provide mom-and-pop crypto customers access to institutional-grade trading speeds. Deployed smart contracts to Ethereum blockchain, built off-chain microservices for exposure calculation during potential chain forks and cross-currency exchange rates. Emphasized TDD at this java house.

Junior Software Engineer

Argit

m Dec 2020 - Dec 2022

Q London, UK

Role Created horizontally-scalable mission-critical software for satellite systems using a distributed cloud technology stack. Designed and tested a new approach to Mission Scheduling with neuro-dynamic programming. Acted as SCRUM master leading agile ceremonies for a team of 8 developers on classified projects in quantum cryptography and machine learning. Emphasized OO design, automated testing, and CI/CD.

Quantum Software Intern

Quacoon

Aug 2020 - Jan 2021

Ohio, US (Remote)

Role Optimised transportation times for imported goods by implementing graph algorithms on D-wave's quantum annealers to solve NP-complete problems.

EDUCATION

University of Glasgow

Theoretical Physics (MSci)

Sept 2014 – Jun 2019

Classification 2.1 (Hons)

TECHNICAL SKILLS

Java, Kotlin, Python, C++, Solidity Kubernetes, Docker, Micronaut, Spring Cucumber, Spock, JUnit Elastic Stack, Jenkins



PROJECTS

Typeform Insights Generator

Polls for TypeForm survey data using webhooks to conduct market research by creating graphical representations of relationships between respondents based on their consumer habits, as suggested by sentiment analysis. Built using Neo4j and NLP4J.

K-Means Clustered Vehicle Routing

Clustered major US cities across 40 states with k-means before optimizing the vehicle routing problem with D-Wave's quantum annealer using quadratic unconstrained binary optimization to find X minimised routes.

Charm Content of a Proton

Master's thesis in collaboration with Fermilab calculated a correlation function for virtual charm content within protons by sampling large sets of Monte Carlo collision data using bootstrapping techniques.

Multivariate analyses for the search of the Higgs Boson with associated top quark production

Researched artificial neural networks and boosted decision trees, learning Bayesian statistics for post-processing and slow learning/adaptive boosting methods as used by the ATLAS team during the search for the Higgs Boson.

INTERESTS

- Former participant of the Recurse Center, an educational programming retreat with competitive entry, based in Manhattan.
- Hosted and produced a documentary-style podcast focusing on social issues.
- Campaigns-coordinator for GU Amnesty International student society.

SOFT SKILLS

Team Work Research Presentation
Time Management Attention-to-Detail
Problem Solving Communication
Leadership