



SOUMYA DASGUPTA

Senior Data Scientist

📍 3 Swallowtail House, 41 Victory Parade, London E201GE

✉️ soumya_02@outlook.com

☎️ +44 7440729684

📅 02/09/1986

🌐 LinkedIn

🏠 Scholar google

🔗 GitHub

👤 PROFILE

Summary:

Creator of aitripwise.com 🌐

Experienced data-scientist with a demonstrated history of working in the urban mobility sector, healthcare and management consulting. Skilled in System Modeling, Python, Matlab, Data Analysis, Data Science, Machine Learning, SQL and Algorithms. Strong research professional with a Doctor of Philosophy (PhD) in Systems and Control with currently 6 years of hands-on work experience in Machine Learning.

🧠 SKILLS

Machine Learning

Regression, Classification, Recommendation, Time Series Analysis, Natural Language Processing, Deep Learning - ANN and CNN.

Python

6 years of hands-on experience

SQL

2 years of hands on experience using Big Query

LLM Generative AI

In-context learning, Tuning LLMs for enterprise data, Hugging Face

Cloud

Azure Synapse Analytics, Azure DevOps, Azure OpenAI, Azure Cognitive Search, Azure

👜 PROFESSIONAL EXPERIENCE

11/2021 – present
London,
United Kingdom

Deloitte Ventures, Tax and Legal 🌐

Senior Data Scientist

- Spearheaded the development of a data-driven solution that delivered exceptional tax savings of over £1 million for clients in the past year. As a lead data scientist, I successfully coordinated and collaborated with crossfunctional teams to achieve these remarkable results.
- Implemented data-driven strategies that not only saved clients thousands of hours but also resulted in multimillion-pound savings. By leveraging key insights from client data, I contributed to substantial client fees earned by Deloitte.
- Demonstrated expertise in Machine Learning (ML) and Deep Learning (DL) techniques, effectively applying them to various tasks such as tax classification, anomaly and outlier identification, data extraction from unstructured documents, time series forecasting, and text understanding using advanced large language models like GPT-3.
- Pioneered innovation and generated new business opportunities by harnessing Large Language Models, such as Azure Cognitive Search and Azure OpenAI, across multiple client use cases. This in-context learning approach helped me stay ahead of the curve in the rapidly evolving Data & AI landscape.
- Collaborated with over multiple clients and experts in the Tax and Legal domain to address technology and business challenges. Through data insights, I successfully unlocked operational efficiencies and financial savings, leaving a significant impact on their operations.

- As the Lead Data Consultant, I took full responsibility for the development of cutting-edge machine learning models and business intelligence solutions. My expertise spanned from data engineering to implementing efficient cloud solutions, showcasing a comprehensive skill set.
- Nurtured and guided junior developers and consultants in various areas, including programming, automation, dashboard creation, data visualization, and the effective communication of results.
- Successfully communicated the value of Data & AI solutions to internal and external stakeholders through presentations and workshops. Outlined the design and benefits of these solutions in proposals, contributing to increased business opportunities for the organization.

08/2021 – 11/2021
London,
United Kingdom

NHS, England

Machine Learning Engineer

- Worked on the prestigious CAP-AI project, a pioneering research program in Artificial Intelligence conducted at Barts Life Sciences in east London.
- Leveraged AI/ML expertise, healthcare data knowledge, and an innovative approach to develop and trial AI solutions focused on improving cancer detection, chronic disease management, and healthcare delivery, including creating an accessible ML-powered cancer detection tool for pathologists to enable optimized, timely treatment decisions for patients.

Trust : Barts Health.

Primary Location: Royal London Hospital.

05/2019 – 06/2021
London,
United Kingdom

Beryl

Data Scientist

- Focused on addressing the bike redistribution problem in bike sharing systems. Tackling the principal operating costs related to bike redistribution and maintenance.
- Efficiently managed the fluctuating demand for bikes, which varies based on factors such as time, day of the week, holidays, and travel disruptions.
- Contributed to optimizing bike sharing operations and reducing operating costs, ultimately boosting the revenue of the firm.
- Worked on predicting the demand for bikes at various bike bays enabling the business to make better decisions regarding bike placement within the scheme. I explored multiple strategies to achieve this goal, like A/B testing, Multi-arm Bandit etc.
- Developed an accurate Machine Learning (ML) model using time series analysis and regression techniques which played a crucial role in predicting bike demand effectively.
- Implemented a user-friendly front-end app and deployed it using the Flask API, which allowed easy access to the predictive insights.
- Incentivized customers based on demand patterns to encourage them to relocate bikes strategically, which helped in managing the overall bike redistribution more efficiently.

04/2016 – 05/2019
Singapore, Singapore

Nanyang Technological University

Senior Research Scientist

- Focused on analyzing heavy-duty truck platoon movement, with one certified driver operating the lead vehicle and the rest autonomously following. Developed precise controllers for accurate velocity and inter-vehicular speed tracking within the platoon.
- Employed machine learning to anticipate accidents on Singapore highways, guaranteeing collision-free operations for the autonomous platoon vehicles. The predictions considered factors like weather conditions and other vehicles' movements. With this foresight, the platoon adjusted driving behavior proactively, augmenting safety and efficiency.
- Developed a sophisticated ML-based simulator (MATLAB, VISSIM, and NS3) to test platooning concepts. Simulated realistic traffic scenarios, enabling evaluation of traffic management algorithms and communication protocols effectively.

- Proudly received recognition with a trophy and cash prizes for our team's impactful work in platooning technology. Our research paper was acknowledged as the most innovative in the field, showcasing excellence and novelty in autonomous vehicle systems.

07/2011 – 12/2011
Kolkata, India

Brainware Group of Institutions 
Assistant Professor

EDUCATION

01/2012 – 01/2016
Kolkata, India

Ph.D
Jadavpur University, Network Control System

08/2009 – 05/2011
Kolkata, India

Masters in Technology
Westbengal University of Technology, Instrumentation and Control

08/2005 – 05/2009
Kolkata, India

Bachelors in Technology
Westbengal University of Technology, Electrical Engineering

LANGUAGES

English



Hindi



Bengali



AWARDS

01/2022

Vincent Bendix Automotive Electronics Engineering Award 

SAE Mobilus

The award recognizes the authors of the best paper relating to the subject matter of automotive electronics engineering.

Publication: An optimal controller synthesis for longitudinal control of platoons with communication scenarios in urban environments and highways.

08/2012

DAAD-AvH Research Grant 

Alexander Humboldt Foundation, Germany

Analysed the effect of data-drops on stability of nuclear power plants using the concepts of switched systems for NCS.

INTERESTS

• Travelling

• Photography

• Cooking