Sougato Bagchi

sougato97@gmail.com | LinkedIn | GiHub

ML Engineer with a diverse experience in software and healthcare industry. Passionate about Financial Markets.

Education

M.S in Computer Science, **University at Buffalo**, NY | GPA : 3.5/4.0 — Aug. 2021 – Aug. 2023

B.Tech in Computer Science **UEM, Kolkata**, India — Aug. 2015 – Apr. 2019

Courses in Financial Markets Research, Algorithmic Trading — Jan 2021

Skills

Languages : Python, C, C++, MATLAB, SQL

Skills : Advanced ML/NLP, NoSQL

Others : MS Office(Excel-VBA), Linux(Shell/bash scripting), Git, Stock Research and Investing

Experience

Machine Learning Engineer — Dec. 2023 – Present
Cozeva — *Seattle, WA*

- **AI Assistant Development:** Led the creation of a proprietary AI assistant using LLM models, tailored to the organization's data ecosystem.
- **Database Architecture:** Designed and integrated a NoSQL-based vector database for efficient text and image vector embedding retrieval.
- **Healthcare Data Analysis:** Applying advanced statistical data analysis, created scorecard and reports.

Research Assistant — Feb. 2022 – Dec. 2023
University at Buffalo — *Buffalo, NY*

- **Image processing**: Generative Model trained, which can be utilized in surveillance, robot navigation, and other areas. IEEE publication rb.gy/qnja08 .
- **Human-Robot Interaction**: Augmented a simple order-driven robot with capabilities, such as Feedback Learning, NLP, and Audio-Visual Recognition. GitHub rb.gy/isc4x9.
- **Robot Navigation**: Location and Navigation Error Optimization of autonomous robots. White paper rb.gy/0729ic.
- **Biometrics**: ML Model trained to recognize human vein patterns on the dorsal side of the palm using Neural Nets. IEEE publication rb.gy/5be87k.
- **Teaching Assistant**: Graded and assisted students on various projects for the course CSE 468/568: Robotics Algorithms.

Machine Learning Engineer, Intern — Jun. 2022 – Aug. 2022
Cozeva — *Fremont, CA*

- Engineered data pipelines for the robust processing of extensive datasets, specifically focusing on patient medical records to support healthcare analytics.
- Extracted critical features for machine learning applications, pinpointing key variables within complex medical data to enhance predictive modeling.
- Conducted associative rule mining to uncover patterns linking social demographics to healthcare service disparities, providing insights into population health management.

Assistant Systems Engineer — May. 2019 – Nov. 2019
Tata Consultancy Services — *Kolkata, India*

- Collaborated in a cross-functional team of approximately 50 people actively engaging in **client interfacing** and conducting **requirement analysis**.
- Specialized in order processing and insightful **data analytics** within the healthcare sector.
- Employed SQL for **database management** and leveraging **MS Excel** for advanced data interpretation and reporting.