Sushovan Mandal, Machine Learning Engineer, IITian

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Passionate Machine Learning Engineer and ideator. More than one year experience solving industry problems using Machine Learning, Data analysis & innovative visualizations. Expert in efficient Python Data Science coding using pandas, NumPy, scikit-learn. Advanced user of Git versioning system, able to comfortably handle large, complex codebase. Fluent in English, Hindi, Bengali.

Experience

Alumnus Software Ltd., Kolkata – Engineer, Data Science Team
APR 2018 – PRESENT | **1 year 3 months**

- ❖ Achieved *70%* accuracy in projections for how different promotion schemes affect B2B sales of different biscuit brands and sub-brands to retailers and wholesalers in a couple of markets.
- ❖ Reduced inefficiency by *10%* in FMCG stock loading using extensive feature engineering and multi-layer ensemble modelling, utilizing AWS as a platform.
- ❖ Improved upon existing methods, predictions for Short Interest of US stocks on given data after analyzing and evaluating many machine learning models as a team.
- ❖ Reduced runtime of codebase for data pre-processing and machine learning modelling over full dataset, by order of magnitude using optimized Python for Data Science code and parallelism.
- ❖ Streamlined reusability across projects by building a modular, optimized code flow framework for sliding window timeseries modelling, independent of machine learning technique utilized.
- ❖ Utilized ML techniques like SARIMAX, Multi-Linear Regression, Random Forest, XGBoost, Clustering, etc.

Alumnus Software Ltd., Kolkata – Trainee Engineer
OCT 2017 – APR 2018 | **7 months**

- ❖ Implemented prototype Chatbot project for a professional scenario in a small team, consisting of Android app, Python Django Server and Google Dialogflow NLP agent.
  - Developed algorithm for stress incident detection using multiple inputs.
  - Trained a comprehensive Dialogflow bot with custom user intents leveraging case-specific data.

Microsoft India Development Centre, Hyderabad – Machine Learning Intern, Bing.com team
MAY 2016 - JULY 2016 | **3 months**

- ❖ Automated Feature Engineering for existing Debugging tool for location query results.

National Digital Library, IIT Kharagpur - Project Student, B. Tech Project
JULY 2015 - NOVEMBER 2016 | **1 year 4 months**

- ❖ Engineered web portal for searching and accessing previous years' Question papers. Used Django Frameworks and MariaDB database backend and REST API.
- ❖ Automated metadata creation for indexing digital library using Python Information Retrieval program utilizing Open-source libraries like lxml, ebooklib.

SAP Labs India, Bangalore - Intern
MAY 2013 - JULY 2013 | **3 months**

- ❖ Experimented with testing automation C# tool and Android mobile app testing.

Skills and Expertise

Python, C, C++ 11, Kotlin, Java, SQL; **Linux** environment & **terminal**; Advanced version control: **git, Github**.
Python libraries: **NumPy, pandas, scikit-learn, Django**; Python **visualization**: **Matplotlib, seaborn, Plotly**.
Development Environments: **Jupyter, PyCharm, Android Studio**; Advanced code editors: **Atom, Sublime**.

Education

Bachelor of Technology - Computer Science & Engineering, IIT Kharagpur
Class of 2017, CGPA: *7.0*

AISSCE 2010, CBSE 10+2 - DAV Model School, Durgapur
All India Senior School Certificate Examination, Science with Computer Science: *89%*

AISSCE 2008, CBSE 10 – DAV Public School, Midnapore
All India Senior School Examination: *88.4%*

Extra-Curricular Activities

- ❖ Won Best Freshers' Award in a 3-member team for building a Differential Drive bot; in an Image Processing event Robocop, utilizing OpenCV libraries, at Kshitij'11, IIT Kharagpur.
- ❖ Contributed as Junior Developer in a student-body research group Autonomous Ground Vehicle at IIT KGP, building autonomous rover prototypes which won a few awards at IGVC '12 & '13, Michigan, USA.
- ❖ Awarded one of the Best Volunteers in NSS as Deputy Group Leader.
- ❖ Hobbies include sketching, road trips, mountain trekking.