Rajarshi Saha, Data Scientist

saha.rajarshi@gmail.com| (480)-452-4998| Dublin, CA | linkedin.com/in/rajarshi-saha-a314a939/

SUMMARY

Organized, enthusiastic data scientist with a strong background in engineering. Passionate about using statistical analysison large data sets to find new insights that strategically drive higher performance. Currently, seeking data science opportunities in the field of semiconductors and process engineering.

SKILLS

LANGUAGES: Python (Pandas, NumPy, Seaborn), SQL, Matlab.
ANALYTICS/DATA VISUALIZATION: Microsoft Excel, Tableau, JMP.
STATISTICAL ANALYSIS: Descriptive/Inferential Statistics, Regression Modeling, Hypothesis Testing.
ENGINEERING MODELING: Finite element analysis using ABAQUS/ANSYS, ATLAS2D Device simulator.

PROJECTS

Bank Direct Marketing: Predict if the client will subscribe a term deposit; Implemented DSM methodology in Jupyter Notebook to predict customer behavior. Investigated Logistic Regression, Decision Trees, Random Forest, and Gradient Boost models. Generated ROC/AUC plots and model predictions on test data.
https://github.com/rajrishikgp/springboard/blob/main/Capstone Project Report/capstone bankdeposit withdatavis.ipynb

Company Bankruptcy Prediction: Bankruptcy data from the Taiwan Economic Journal; Implemented DSM methodology on Jupyter Notebook to predict bankruptcy behavior. Investigated accuracy and ROC/AUC with various classifier models and deep learning models with early stopping, dropouts and batch normalizations.
https://github.com/rajrishikgp/springboard/blob/main/capstone bankruptcy modeling.ipynb

Twitter Sentiment Analysis: Detecting hatred tweets; Natural Language processing to build supervised learning models and deep learning models to classify tweets that are hateful/racist from a 32k tweet repository. Used TfidVectorizer to preprocess data and deep neural networks to predict tweet sentiments.

CURRENT EMPLOYMENT

Sr. Principal Process Development Engineer, FormFactor Inc., CA   May 2017- present
Developed and implemented new semiconductor processes into production as per customer requirements. Coordinated over USD 500k SMT tool buy-off and released to High Volume Manufacturing.

EDUCATION

Springboard Data Science Career Track, Certification   2022
6-month intensive course in data science, machine learning, Python and SQL.
Arizona State University, Tempe, Arizona
Doctor of Philosophy in Electrical Engineering with specialization in solid-state electronics   2008
Master of Science in Engineering Science with specialization in Materials Science and Engineering.   2001
Indian Institute of Technology, Kharagpur, India
Bachelor of Technology(hons.) in Metallurgical and Materials Engineering.   1999

AWARDS AND ACHIEVEMENTS

- Won four fame awards for process engineering/yield improvements at *FormFactor Inc*.
- Two US patents (granted) and 1 provisional patent in semiconductor/MEMS processing.
- Over 25 technical publications in international journals, 15 conference presentations and 2 book chapters.
- Doctoral dissertation showcased on front cover of *IEEE TNSRE, 2010.*