

Abhranil Bhattacharjee

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EDUCATION

JADAVPUR UNIVERSITY

BE IN COMPUTER SCIENCE

2016 - 2020 | Kolkata, India

SALT LAKE SCHOOL

Kolkata, India

LINKS

Github:// [abhranil08](#)

LinkedIn:// [abhranil](#)

Kaggle:// [abhranil08](#)

SKILLS

LANGUAGES

Java • Python • Javascript • R

CSS • HTML • C++ • Latex

DATABASES

MySQL • MemSQL • MongoDB • Elastic Search

Azure Databases & DataLake Services • AWS

Databases

BUILD TOOLS

Gradle • Maven

OPERATING SYSTEMS

GNU/Linux • Windows

DATA SCIENCE

PyTorch • Tensorflow • Scikit-learn • Tableau

Keras • Numpy • Pandas • OpenCv

OTHERS

Git • SVN • CVS • Kibana • Logstash

PySpark • Grafana • Prometheus

Bash Scripting • IntelliJ • VSCode • JIRA

COMPETITIONS

DATA SCIENCE - KAGGLE

• Microsoft Malware Prediction, by Microsoft. Predicted a Windows machine's probability of getting infected by various Malwares with an **accuracy of 63.8 %, highest - 67%**.

• Customer Transaction, by Santander. Predicted a customer transaction's probability with an **accuracy of 91% percent, highest - 93%**.

COMPETITIVE PROGRAMMING

• Facebook Hacker Cup Qualifier, 2018

• SnackDown Final Online Elimination Round, 2017 : Global Rank 855.

• Codechef | Hackerrank: 4 Silver, 3 Bronze | Handle : [abhranil08](#) (both)

EXPERIENCE

GOLDMAN SACHS | SDE II

July 2020 – Present | Bengaluru, IN

- **Tech Stack** - Java, Python, MySQL, MEMSQL, Tableau, GSDashboards, DataLakes
- Currently working in the Risk division, to develop financial systems for monitoring and analyzing risk for the firm.
- Worked on setting up the VaR Re-engineering pipeline and REST APIs to migrate aggregation from our legacy system MARS to GRDB which is a MEMSQL-based system for **47k accounts (~11 million positions daily)**. With GRDB live in production, users/reviewers can see risk for large portfolios in **real-time** which would have previously required **~ 45mins**.
- Worked on optimizing the Market Risk Aggregation System(MARS) which aggregate risk metrics like VaR, & Stress daily for **more than 15 million positions**. Thus saving **~ 30mins/heavy query** making it less time-sensitive & flexible.
- Worked on designing, implementing, and optimizing the automatic Backtesting pipeline for different risk metrics and then notifying breaches to senior management, thus saving **~ 21 development hours/week** .
- Automated and then enhanced the Limit Monitoring system, most of which was manual. As a result, users are required to only **add configs for a deliverable or Asset** to start monitoring their limits.
- Migrated 2 of our aggregation systems from **JDK8 to JDK11** and integrated **ELK stack** with the same for monitoring, logging, and analyzing user queries.
- Developed automatic pipelines for data visualization reports for **tracking the performance** of different stages in our Market Risk plant.
- Implemented **watermarking techniques** to improve the Credit Derivative (CDSN) pipeline efficiency, automating data ingestion & streamlined reporting capabilities by populating **Data Lake**, significantly **reducing manual work**.
- Reduced daily databasing errors by **75%** as part of weekly support work during the last quarter.

RESEARCH AND INNOVATION LABS, TCS | R & D INTERN, NATURAL LANGUAGE PROCESSING, DEEP LEARNING.

May. 2019 – July. 2019 | Gurgaon, IN

- Part of Web Intelligence & Text Mining team - Recommender Systems and Aspect Based Sentiment Analysis.
- Analyzed different word Embeddings: Word2Vec, GloVe, FastText; Deep Learning models: LSTM/BiLSTM, RNN/BiRNN, and pre-trained model: BERT
- Worked on Recommender Systems, Personality Detection, and Reviews, achieving a **2-3%** more accurate prediction of the performance of different Aspects than previous works.

CRIO.DO | SOFTWARE ENGINEERING INTERN

May. 2019 – June. 2019 | Remote

- Java backend for a distributed, highly available, food ordering platform by using RESTful APIs.
- MongoDB querying | Improved home screen loading time (using Java Redis caching), search support, and search speed.

IBM | SOFTWARE ENGINEERING INTERN

Jan. 2018 – Feb. 2018 | Remote

- Developed Cognitive search-based travel Chatbot whose engine was powered by Watson Assistant in Android Studio and included web scrapping techniques by using JSoup for gathering dynamic data.

ACHIEVEMENTS

CRICKET AND ATHLETICS

- **University Blue** - Captain of JU cricket team in the **Inter University East Zone Cricket Tournament** organized by the Association of Indian Universities for four years of undergrad.
- National level cricketer - Part of the **West Bengal Under 19 cricket team**, 2019.
- National level athlete - Represented West Bengal School team in the **School National** organized by ASISC twice, held in Odisha (2011) and Kerala (2013), as well as being named "**Best Athlete**" in the "West Bengal School Regional Sports Meet" twice.
- **JU Sports Board Member** - Only **three** students were chosen from among all university students.

ACADEMICS

- Finalist, Business plan Contest held at Kshitij 2017, organized by I.I.T, Kharagpur.
- Third best team in the Jadavpur University Chapter of the Hult Prize Business plan contest, 2016.
- Got selected as Research Summer Intern, 2019 at DESE, IISC Bangalore in Machine Learning/Deep Learning domains.
- Summer research intern at IIM, Lucknow and IIT Kharagpur in Data Analytics and Text Analytics respectively.

RESEARCH

JADAVPUR UNIVERSITY | COMPUTER VISION , DEEP LEARNING & NLP RESEARCHER

Jan 2014 – Jan 2015 | Kolkata, West Bengal.

- Worked with **Dr. Nibaran Das** on Image Caption Generation, an automatic process of generating textual description from an image - based on the objects and actions in the image.
- Worked with **Dr. Sudip Kumar Naskar** on Neural Machine Translation. Implemented state-of-the-art Transformer model which outperformed various Machine translation baseline models like RNNs, LSTMs, and Attention models involving two major languages English and German at **WMT, 2019**.

INDIAN STATISTICAL INSTITUTE (ISI) | COMPUTER VISION , DEEP LEARNING & NLP RESEARCHER

May. 2017 - July. 2017 | Kolkata, West Bengal.

- Worked on Facial Component Analysis (Eye blink detection using Facial Landmarks) and Document Scanner (scans documents by perspective transform) with **Dr. Umapada Pal**