Personal Information

Date of Birth December 21st, 1996

Sex Male

Mobile +91 96 8124 0675

Email subhasish@cmi.ac.in

Language Bengali (Native), English, Hindi

Github https://github.com/Subhasishbasak

Permanent address 33 A/B Goabagan Lane, Beadon Street, kolkata-700006

Education

2018 - present Chennai Mathematical Institute Chennai, Tamil Nadu

M.Sc Data Science CGPA **9.11/10**

2015 – 2018 St. Xavier's College (Autonomous) kolkata, West Bengal

B.Sc Statistics (Hons.) CGPA **8.67/10**

2013 – 2015 West Bengal Council of Higher Secondary Education

XII Standard Percentage 91.4%

2003 – 2013 West Bengal Board of Secondary Education

X Standard

Percentage 92.7%

Research & Project Experience

October 2019 – present Supervisor: Prof. Julien BECT & Prof. Emmanuel VAZQUEZ Laboratoire des signaux et systemés (L2S), Remote internship

- **Topic** : Numerical aspects of hyperparameter estimation using MLE in Gaussian **Process Regression**
- Role: The scope of this article is to explore different numerical issues arising out of such optimization techniques when performed across different software packages.

16 - 20 December 2019 Indian Institute of Science Education and Research, IISER - Pune Indo-French Centre for Applied Mathematics (IFCAM), Winter school

- Topic: Graphs and Random Process.
- Role: Attended mini courses on Branching random walks, Galton-Watson trees and random networks.

May – July 2019 Laboratoire des signaux et systemés(L2S), Summer internship École CentraleSupelec, Université Paris- Saclay – Gif-sur-Yvette, France Supervisor: Prof. Emmanuel VAZQUEZ

- **Topic**: Reviewing scalability of Python toolboxes implementing Gaussian Process Regression.
- Role: Built a universal wrapper for Python toolboxes implementing Gaussian Process regression, to perform comparative performance tests using simulated test beds and reviewed the toolboxes over different features, for future developement.

3 – 14 December 2018 Indian Institute of Science Education and Research, IISER – Kolkata Indo-French Centre for Applied Mathematics (IFCAM), Winter school

- **Topic**: Stochastic Methods for uncertainty quantification and sensitivity analysis of complex models.
- Role: Learnt implementation of Sobol indices in sensitivity analysis and the Kriging approach of metamodelling in Geo-statistical domain using R.

January – July 2018 St. Xavier's College (Autonomous), Kolkata.

Undergraduate Dissertation.

Supervisor: Prof. Debjit SENGUPTA

- **Topic**: Time Series analysis of Gold price using R.
- Role: The aim was to develop a predictive model to forecast the average monthly gold price, using Autoregressive process model fitting and backtesting with R and MINITAB.

Selected Coursework

Statistics Probability Theory I-III, Sampling theory, Statistical Inference I-III, Nonparametric Statistical Inference, Multivariate Analysis, Linear Statistical Models, Statistical Quality Control, Econometrics, Time Series Analysis

Mathematics

Real analysis, Numerical Linear algebra, Algebra I-II, Calculus I-II (single and multivariate), Combinatorics.

Data Science Data mining & Machine Learning, Regression & Predictive analysis, Distributed Computing for Big Data, Reinforcement Learning, Design & Analysis of Algorithms, Advanced Machine Learning (DL), Information retrieval, **Text Analytics**

Technical & Programming Skills

OS Proficient in Linux and Windows operating systems

Programming **Python**, **C++**

Softwares R, MINITAB, MS-Office, Apache Hadoop, Hive, Spark

Other competencies SQL, Gitlab, LATEX, Google Cloud Platform

Achievements

- 2019 Qualified as team from CMI in Credit-Suisse Top Quant hackathon 2019
- 2018 Secured All India Rank 12 in admission test for Master of Quality Management Science (MS-QMS) program conducted by Indian Statistical Institute (ISI)
- 2018 Secured All India Rank 75 in Joint Admission test for Master (JAM 2018) in Mathematical Statistics (MS) paper conducted by Indian Institute of Technology Bombay (IIT-B)

References

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Dr. Emmanuel VAZQUEZ

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