Subhasish Basak Curriculum Vitae

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
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Education

2018 – present **Chennai Mathematical Institute** *Chennai, Tamil Nadu*
M.Sc Data Science
CGPA **9.31/10**

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, Non-parametric 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, Big Data with HADOOP, 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

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. Madhavan MUKUND
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Dr. Emmanuel VAZQUEZ
Associate professor
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