



Education			
Program	Institution	CPI/%	Year
Int.M.Tech+Ph.D. (Industrial Mathematics scientific computing)	IIT Madras	8.73	2019-
MSc (Pure Mathematics) [proof]	University of Calcutta	81.2	2019
BSc (Mathematics) [proof]	St.Xavier's College	75.83	2017
XII - WBCHSE [proof]	M.S.R.K.A.V.	89.6	2014
X - WBBSE [proof]	M.S.R.K.A.V.	91.1	2012

- Scholastic Achievements**
- **IIT GATE MATHEMATICS AIR-99(2019)**[proof]
 - "INSPIRE" scholarship by **DST,Govt.of India** for being in top 1% in board exam, XII [proof] 2014-2019
 - awarded Merit Certificate by **St.Xavier's College,Kolkata** for securing above 70% in **first four semesters of BSc. Honours**[proof] 2017

- Key Projects**
- **Google and Pagerank Algorithm** Mar 2020-May 2020
Modelling Workshop :Prof S.Sundar C
 - studied Pagerank computation using Markov chain and Frobenius theorem
 - constructed a basic search engine based on pagerank algorithm using python, scipy and beautiful soup
 - **Topological optimization in one dimension** Jan 2020-Mar 2020
Modelling Workshop: Prof S.Sundar C
 - studied about topological sensitivity analysis using classical gradient technique
 - formulated cost functional for two one dimensional equations to show that the form of topological gradient and classical gradient may differ from each other.
 - **Decision Tree in Python** Sep 2019-Nov 2019
OOPs Lab :Prof.S.Sundar
 - Implemented **SLIQ(decision tree classifier)** from scratch for handling both the numerical and categorical attributes,using gini index,information gain and entropy.
 - Used a pre-sorting technique for optimization in the tree growth phase.
 - **Implementation of linear solver in C++ | Direct methods and iterative methods** Sep 2019-Nov 2019
OOPs Lab :Prof.S.Sundar
 - Implemented methods like gauss elimination and jacobi on the basis of sparsity constraints to optimize the time and space.

- Course Work**
- **Mathematics:** Mathematical Modelling in Industry,Modelling Workshop II,Numerical Linear Algebra ,Numerical Methods & Scientific Computing,Numerical Optimization,Numerical Solution of PDE

- **Algorithms and Data Structures:** Data Structures in Scientific Computing, Object Oriented Programming.
- **Machine Learning & Statistics:** Data Analysis & Visualization in R/Python/SQL, Applied Statistics, Stochastic Methods in Industry, Statistical Foundations of Data Science
- **Finance:** Mathematical Finance
- **Online course:** AI with Deep Learning (from GUVI, An IIT-M and IIM-A Incubated Company), NVIDIA Deep learning [\[proof\]](#)

Technical Skills

- **Programming Languages:** C++, Python, R, Matlab
- **Tools and Technologies:** Numpy, Pandas, scikit-learn, TensorFlow, Pytorch, Matplotlib, \LaTeX

Co Curricular Activities & Positions of Responsibility

- Teaching assistant for **Mathematical modelling in Industry** and **Series and Matrices** at Department of Mathematics, IIT Madras
- Participated in **Madhava Mathematics Camp** sponsored by **NBHM, Govt. of India** [\[proof\]](#) Oct 2015-Nov 2015
- Participated in **Analytica-2014** organized by Department of Mathematics, St. Xavier's College, Kolkata [\[proof\]](#)
- Taught unprivileged children every Sunday for one year on behalf of the NGO **IRERD** [\[proof\]](#) 2015-16
- Coordinator of **Forays-2020**, annual seminar at Department of Mathematics, IIT Madras