# Mainak Mandal

Curriculum Vitae



## Academic Profile

2008–2010 **Secondary**, *West Bengal Board of Secondary Education*, -82%, Physical science- 92, English - 80,Mathematics - 100.

2010–2012 **Higher Secondary**, *West Bengal Council of Higher Secondary*, -82%, Physics – 86, Chemistry - 86, Mathematics - 86.

**Entrance** 

Exams Qualified for IMO(SOF) 2nd round in 8th and 11 grade.

AIEEE- AIR 30,300.

WBJEE- Rank -1818.

BITSAT- Marks obtained- 270.

VBCAT-Rank 21.

Qualified in IISER Entrance test and selected for INSPIRE Fellowship.

Recipient of NNMCB Summer Research Scholarship 2015.

2012—present **BS–MS**, *Indian Institute of Science Education and Research, Kolkata*, Currently in 9th semester, C.G.P.A - 7.51 (8.33,7.89,7.42,8.17,6.71,6.14).

Courses , Linear Algebra, Probability and Statistics, Statistical Inference, Measure theory, Network theory, Graph theory, C, Algorithms and Data Structure, Numerical Analysis, Practical Statistical Lab, Partial Differential Equations, Functional analysis, Topology and Differential Geometry Real and complex Analysis, Algebra and Galois theory, Fourier analysis, Algebraic Topology, Machine Learning (Andrew NG, Coursera) .

# Work Experience

#### Computer Skills

Programming

Languages R, Python, FORTRAN 77, Matlab, C.

Modules Numpy, Scipy, Matplotlib, Opency, Scikit, GNUplot.

CAS SageMath

Web

technologies HTML5,CSS,Javascript, Jquery, Bootstrap, Jekyll, Web Scrapping with Python.

Research Projects

Summer 2014 **Project on Blood flow models and Neural networks**, *Department of Mathematics M.N.I.T, Allahabad*, Under supervision of Dr.Manoj Kumar, Associate Professor, M.N.I.T, Allahabad.

- Summer 2015 Reconstructing GRNs with Bayesian networks using Small World Prior,

  Department of Electrical Engineering, IIT Delhi, Under supervision of Dr.Sumeet

  Agarwal, Assistant Professor, IIT Delhi in the National Network for Mathematical and Computational Biology scholarship scheme.
- Autumn 2015 Reconstructing GRNs with Bayesian networks with Scale-free Prior,

  Department of Biological Sciences, IISER Kolkata, Under the supervision of Dr.Robert

  John Chandran, a semester project.
- January 2016 Workshop on Mathematical and Computational Biology, IISER Kolkata, a two day workshop on mathematical and computation biology organised by NNMCB and IISER Kolkata.
- Summer 2016 Mathametical Analysis of Geometric Visual Illusions, Masters thesis, ISI Kolkata, Under guidance of Dr. Kuntal Ghosh, Asistant Professor,.

  Machine Intellignece Unit, ISI Kolkata

## Extra Curricular Activities

Web

Designing Developed the Inquivesta(Science fest of IISER Kolkata) 2014 and 2015 beta website.

Robotics Paricipated in Line following, Robo-soccer and won Maze solving and competition at Instuo 2013 IIEST, Shibpur. Proficient with basic electronics, microcontrollers (Arduino, Raspberry-pi, BeagleBone Black), embedded C, sensor computer interface.

# Personal Information

Name Mainak Mandal.

Date of Birth 01-10-1994.

Place of Birth Chittaranjan, West Bengal, India

Guardian's Sri Balaram Mandal.

Name

Nationality Indian

Languages English, Bengali(mother tongue), Hindi.

**Declaration:** I hereby declare that all the details furnished above are true to the best of my knowledge and belief.

Mainak Mandal