

Narmada Sambaturu

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Indian Institute of Science,
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Research Interests Computational Biology, Systems Biology, Immunology, Cancer Genomics, Cancer Immunotherapy, Host-Pathogen Interactions, Epidemiology, Network Approaches to Systems Biology.

Education **Doctor of Philosophy, Mathematical Biology Program,** 2015 - ongoing
National Mathematics Initiative,
Indian Institute of Science, Bengaluru, India.
Supervisors: Prof. Nagasuma Chandra, Prof. N. Srinivasan.

Master of Science, School of Computing, 2012 - 2015
National University of Singapore, Singapore.
Supervisor: Prof. Wing-Kin Sung.

Bachelor of Engineering, Computer Science and Engineering, 2005 - 2009
M.S.Ramaiah Institute of Technology, Bengaluru, India.
affiliated to Visvesvaraya Technological University.

Research Experience **• PhD student,** 2015 - ongoing
Mathematical Biology Program, National Mathematics Initiative,
Indian Institute of Science, Bengaluru, India.
Supervisors: Prof. Nagasuma Chandra, Prof. N. Srinivasan.

• Visitor, Oct 2016 - Dec 2016
Department of Applied Mathematics,
School of Mathematics,
University of Leeds, Leeds, UK
Research advisors: Prof. Carmen Molina-París, Prof. Grant Lythe.

• Junior Research Fellow, Mar 2015 - Jul 2015
Indian Institute of Science, Bengaluru, India.
Research advisor: Prof. Nagasuma Chandra.

• Intern, Aug 2006
Bioinformatics Centre,
Indian Institute of Science, Bengaluru, India.
Research advisor: Prof. K. Sekar.

Work Experience **Developer, Tata Consultancy Services** 2009 - 2011
Technology Excellence Group,
Bengaluru, India.

Teaching Experience **Learning Enabler, Tata Consultancy Services** Jan 2010 - Feb 2010
Common Initial Learning Program,
Bidadi, Karnataka, India.

Publications	<ol style="list-style-type: none"> 1. Narmada Sambaturu, Sumanta Mukherjee, Martín López-García, Carmen Molina-París, Gautam I. Menon, and Nagasuma Chandra. <i>Role of genetic heterogeneity in determining the epidemiological severity of H1N1 influenza.</i> PLoS Computational Biology 14(3) (2018): e1006069. 2. Narmada Sambaturu, Madhulika Mishra, and Nagasuma Chandra. <i>EpiTracer - An Algorithm for Identifying Epicenters in Condition-specific Biological Networks.</i> BMC genomics 17.4 (2016): 543. 3. Narmada Sambaturu, Madhulika Mishra, and Nagasuma Chandra. <i>EpiTracer - An Algorithm for Identifying Epicenters in Condition-specific Biological Networks.</i> Proceedings of the 2015 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). IEEE Computer Society, 2015. (Best Student Paper) 4. Narmada Sambaturu <i>Towards Handling Repeats in Genome Assembly.</i> MSc dissertation, 2014. 5. Jayavel Sridhar, Narmada Sambaturu, Radhakrishnan Sabarinathan, Hong-Yu Ou, Zixin Deng, Kanagaraj Sekar, Ziauddin Ahamed Rafi, and Kumar Rajakumar. <i>sRNAsScanner: A Computational Tool for Intergenic Small RNA Detection in Bacterial Genomes.</i> PLOS ONE 5, no. 8 (2010): e11970 6. Patil, Annapurna P, Narmada Sambaturu, Chunhaviriyakul, Krittaya. <i>Convergence Time Evaluation of Algorithms in MANETs</i> International Journal of Computer Science and Information Security, IJCSIS 2009, Vol. 5, No. 1, pp. 144-149, September 2009
Workshop and conference presentations	<ul style="list-style-type: none"> • Narmada Sambaturu, Sridhar Hannenhalli, and Nagasuma Chandra. Poster. <i>Cutting through the complexity of genomic data: A general method to identify candidate genes.</i> RECOMB/ISCB Conference on Regulatory and Systems Genomics with DREAM Challenges, New York, NY, Nov 19 - 21 2017. • Narmada Sambaturu, Sumanta Mukherjee, Martín López-García, Carmen Molina-París, Gautam I. Menon, and Nagasuma Chandra. <i>Role of genetic heterogeneity in determining the epidemiological severity of H1N1 influenza.</i> Discussion meeting on Mathematical Models of Infection, Immunity and Inflammation, Indian Institute of Science, Bengaluru. In association with the EPSRC-DST Indo-UK Initiative in Applied Mathematics and the EU-FP7 supported Indo-European Research Network in Mathematics for Health and Disease. April 2017.
Graduate Coursework	<p>MSc (NUS): Advanced Combinatorial Methods in Bioinformatics, Advanced Algorithms, Knowledge Discovery and Data Mining, Modeling and Analysis Techniques in Systems Biology, Advanced Topics in Data Mining.</p> <p>PhD (IISc): Current Trends in Drug Discovery, Special Topics in Theoretical Biology.</p>
Computer Skills	<p>Languages: Python, R, MATLAB, C, C++, Java, Perl, HTML.</p> <p>Bioinformatics tools: Cytoscape, BLAST, CLUSTALW, IEDB tools, SAMtools, BWA.</p>

Awards

- Best Student Paper Award, 2015 IEEE International Conference on Bioinformatics and Biomedicine (BIBM).
- One of 50 students selected from all over India for participation in a summer camp in Biotechnology at M.S.Swaminathan Research Foundation, Chennai, India (April 2013).
- All India Rank 25 in Secondary School Certificate (Std X) (2003).