

Prajakta Nimbhorkar

CONTACT INFORMATION

The Institute of Mathematical Sciences
Theoretical Computer Science
CIT Campus, Taramani
Chennai, India 600 113

Phone: +91-44-2254 1856 (ext 240)
Fax: +91-44-2254 1586
E-mail: prajakta@imsc.res.in
Homepage: www.imsc.res.in/~prajakta

RESEARCH INTERESTS EDUCATION

Algorithms and Complexity, Graph Theory, Algebraic Structures, Randomness

The Institute of Mathematical Sciences, Chennai, India

Ph.D. Student, Theoretical Computer Science, August 2007-current.

- Dissertation Topic: “Complexity Analysis of Some Problems in Planar Graphs, Bounded Tree-Width Graphs, and Planar Point Sets”
- Advisor: Meena Mahajan

Tata Institute of Fundamental Research, Mumbai, Maharashtra, India

Ph.D. Student, School of Technology and Computer Science, August 2005-July 2007.

Indian Institute of Technology Bombay, Mumbai, Maharashtra, India

Master of Technology, Information Technology, 2003-2005

Government College of Engineering Aurangabad, Aurangabad, Maharashtra, India

Bachelor of Engineering, Computer Science and Engineering, 1999-2003.

AWARDS/ SCHOLARSHIPS

- National Talent Search Scholarship (1998)
- Dhirubhai Ambani Foundation Scholarship (1999-2003)

PUBLICATIONS

1. Log-space Algorithms for Paths and Matchings in k -trees
(Joint work with Bireswar Das, and Samir Datta)
In Proceedings of *Symposium on Theoretical Aspects of Computer Science (STACS)*, 2010 (To Appear).
2. Graph Isomorphism for $K_{3,3}$ -free and K_5 -free graphs is in Log-space
(Joint work with Samir Datta, Thomas Thierauf, and Fabian Wagner)
In Proceedings of *Foundations of Software Technology and Theoretical Computer Science*, 2009.
3. Planar Graph Isomorphism is in Log-space
(Joint work with Samir Datta, Nutan Limaye, Thomas Thierauf, and Fabian Wagner)
In Proceedings of *IEEE Conference on Computational Complexity*, 2009.
4. The planar k -means problem is NP-hard
(Joint work with Meena Mahajan, and Kasturi R. Varadarajan)
In Proceedings of *3rd Annual Workshop on Algorithms and Computation WALCOM*, 2009.
5. Longest Paths in Planar DAGs in Unambiguous Logspace
(Joint work with Nutan Limaye, and Meena Mahajan)
In Proceedings of *Computing: The Australasian Theory Symposium CATS*, 2009.
(To appear in CJTCS special issue for CATS 2009)

6. 3-connected planar graph isomorphism is in Logspace
(Joint work with Samir Datta, and Nutan Limaye)
In Proceedings of *Foundations of Software Technology and Theoretical
Computer Science*, 2008.

REFERENCES

Meena Mahajan	<i>email: meena@imsc.res.in</i>
Samir Datta	<i>email: sdatta@cmi.ac.in</i>
V. Arvind	<i>email: arvind@imsc.res.in</i>
Eric Allender	<i>email: allender@cs.rutgers.edu</i>
Jacobo Torán	<i>email: jacobo.toran@uni-ulm.de</i>
Vinodchandran N. Variyam	<i>email: vinod@cse.unl.edu</i>