

CONTACT INFORMATION	Room No - 118, Research and Project Lab., Dept. of Comp. Sc. and Engg. Indian Institute of Technology Kharagpur Kharagpur, West Bengal - 721302 India	Landline: +91-3222-281431 Mobile: +91-9477027976 srobona.mitra@gmail.com srobona@cse.iitkgp.ernet.in http://cse.iitkgp.ac.in/~srobonamt
OBJECTIVE	Full-time position where I can get hands-on experience on the state-of-the-art verification techniques for industrial-strength designs and exposure towards incorporating new research directions to the industrial context.	
AVAILABILITY	<ul style="list-style-type: none"> ▷ Start time is negotiable, but preferably March-April 2012 ▷ Geographic location is flexible, but preferably in Bangalore, India 	
RESEARCH INTERESTS	Formal, Semi-formal and Post-silicon Verification of Hardware Designs	
EDUCATION	Indian Institute of Technology Kharagpur , Kharagpur, India	
	Ph.D., Computer Science and Engineering	March 19, 2007 - Present
	<ul style="list-style-type: none"> - Thesis Topic: Formal Methods for Effective Verification of Local Design Changes - Area of Study: Hardware Verification - Advisors: Professor Pallab Dasgupta and Professor Partha Pratim Chakrabarti 	
	M.Tech., Computer Science and Engineering	July 2004 - June 2006
	<ul style="list-style-type: none"> - CGPA: 9.63 (10.00 scale) (Rank 1) - Thesis Topic: A framework for battery-aware multiprocessor task scheduling in real-time embedded systems - Advisor: Professor Anupam Basu 	
	Faculty of Engg. and Technology, Jadavpur University , Kolkata, India	
	B.E., Computer Science and Engineering	June 2000 - June 2004
	<ul style="list-style-type: none"> - Percentage: 88.25% (Rank 6) - Project Topic: Development of a software interface to the performance monitoring hardware of processors - Advisor: Professor Nandini Mukhopadhyay 	
REFEREED JOURNAL PUBLICATIONS	<p><i>Srobona Mitra, Priyankar Ghosh and Pallab Dasgupta, "Verification by parts: Reusing Component Invariant Checking Results", accepted for publication in IET Computers & Digital Techniques journal, June 2011</i></p> <p><i>Srobona Mitra, Ansuman Banerjee, Pallab Dasgupta and Harish Kumar, "Trace Assisted Formal Methods for the Verification of Bug Fixes", communicated to IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (IEEE TCAD), September 2011</i></p> <p><i>Srobona Mitra, Ansuman Banerjee, Pallab Dasgupta and Harish Kumar, "Formal Methods for Ranking Counterexamples Through Assumption Mining", Manuscript under preparation</i></p>	

- SELECTED CONFERENCE PUBLICATIONS *Srobona Mitra*, Ansuman Banerjee and Pallab Dasgupta, “Formal Methods for Ranking Counterexamples Through Assumption Mining”, accepted in *Design Automation and Test in Europe (DATE)*, 2012
- Anvesh Komuravelli, *Srobona Mitra*, Ansuman Banerjee and Pallab Dasgupta, “Backward Reasoning with Formal Properties: A methodology for bug isolation on simulation traces”, in the Proceedings of *Asian Test Symposium (ATS)*, November 2011, pp. 238 -243
- Aritra Hazra, *Srobona Mitra*, Pallab Dasgupta, Ajit Pal, Debabrata Bagchi and Kaustav Guha, “Leveraging UPF-Extracted Assertions for Modeling and Formal Verification of Architectural Power Intent”, in the Proceedings of *Design Automation Conference (DAC)*, June 2010, pp. 773-776
- Aritra Hazra, Ansuman Banerjee, *Srobona Mitra*, Pallab Dasgupta, P. P. Chakrabarti and C. R. Mohan, “Cohesive Coverage Management for Simulation and Formal Property Verification”, in the Proceedings of *IEEE Computer Society Annual Symposium on VLSI (ISVLSI)* 2008, pp. 251 - 256
- Anirban Lahiri, Anupam Basu, Monojit Choudhury and *Srobona Mitra*, “Battery-aware Code Partitioning for a Text to Speech System”, in the Proceedings of *Design Automation and Test in Europe (DATE)* 2006, pp. 1 - 6
- POSTERS *Srobona Mitra*, Pallab Dasgupta, Sudhindra Pandav and Harish Kumar, “Trace-Enabled Formal Verification: An Approach for Formal Verification of Post-Silicon Debug and Bug-Fixing”, accepted in poster session of *Intel India Innovation Day*, March 2011
- PROFESSIONAL EXPERIENCE **Sponsored Research and Industrial Consultancy (SRIC), IIT Kharagpur**
Designation: Research Consultant March 19, 2007 - present
- Intel Technology India Pvt. Ltd., Bangalore, India**
Designation: Research Intern February 22, 2010 - September 22, 2010
- IXIA Technologies Pvt. Ltd., Kolkata, India**
Designation: Software Engineer, Development June 22, 2006 - March 15, 2007
- TEACHING EXPERIENCE **Dept. of Computer Science and Engineering, IIT Kharagpur**
I have been teaching assistant in the following courses: 1. *Foundations of Computing Science* 2. *Programming and Data Structures Theory* 3. *Advanced Graph Theory* 4. *Distributed Systems* 5. *CAD for VLSI* 6. *Artificial Intelligence* 7. *Algorithms*. Have taught the following topics in these courses. 1. *Model Checking* 2. *Temporal Logics* 3. *Constraint Satisfaction Problems* 4. *LISP* 5. *PROLOG* 6. *Neural Networks*. I have also presented lectures on *Model Checking* for the summer course on VLSI, organized by the *Advanced VLSI Design Laboratory*, IIT Kharagpur in the two consecutive years 2009 and 2010.
- ACHIEVEMENTS AND AWARDS
- ▷ Was a finalist and Conclave invitee in the *Google India Women in Engineering Award 2010*, on 25th and 26th February 2010, at Google Hyderabad.
 - ▷ I won the Institute Silver Medal in IIT Kharagpur for acquiring the 1st rank in M.Tech (CS) 2006.
 - ▷ GATE score of 99.72 percentile (All India Rank 97) in 2004.
 - ▷ 30th Rank in the West Bengal Joint Entrance Examination 2000.
 - ▷ Qualified for National Scholarship in both Madhyamik Pariksha 1998 (91.25%) with state rank 28, and Higher Secondary Examination, 2000 (92%) with state rank 24.

REFERENCES

Prof. Pallab Dasgupta

Professor, Dept. of Comp. Sc. and Engg., IIT Kharagpur, Kharagpur, India - 721302

Phone: +91-3222-283470, Fax: +91-3222-255303, Email: pallab@cse.iitkgp.ernet.in

Prof. Partha Pratim Chakrabarti

Dean SRIC (Sponsored Research & Industrial Consultancy),

Professor, Dept. of Comp. Sc. and Engg., IIT Kharagpur, Kharagpur, India - 721302

Phone: +91-3222-282037, Fax: +91-3222-278985, 255303, Email: ppchak@cse.iitkgp.ernet.in

Prof. Anupam Basu

Professor, Dept. of Comp. Sc. and Engg., IIT Kharagpur, Kharagpur, India - 721302

Phone: +91-3222-83462, Fax: +91-3222-55303, Email: anupam@cse.iitkgp.ernet.in

Harish Kumar

MGD-BDC Xeon Architecture Manager, Intel Technology India Pvt. Ltd.,

136 Airport Road, Bangalore, India - 560017

Phone: +91-80-2507-5594, Cell: +91-9845978911, Email: harish.kumar@intel.com