Lakshmi Manasa G
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Academic Details

Qualification	University/Board	Year of Passing	Percentage/CPI
PhD, Computer Science	IIT,Bombay	In II sem	9.63
Mtech, Computer Science	IIT, Bombay	2008	9.54
B.E, Computer Science	R.V.College of Engineering, Bangalore	2006	82.21%
XII std	Dept. of Pre-University Education, Karnataka	2002	88.5%
X std	K S E E B, Karnataka	2000	91.68%

Academic Achievements:

- GATE 2006: AIR 63 (out of 23,000 candidates)
- CET 2002 (Karnataka Engg) : RANK 327 (out of more than 1.5 lakh candidates)
- Finalist of Google Women in Engineering Competition 2009.

Publications:

1. 1.Lakshmi Manasa, Shankara Narayanan Krishna, Kumar Nagaraj: Updatable Timed Automata with Additive and Diagonal Constraints. CiE 2008: 407-416
2. P. Vijay Suman, Paritosh K. Pandya, Shankara Narayanan Krishna, Lakshmi Manasa: Timed Automata with Integer Resets: Language Inclusion and Expressiveness. FORMATS 2008: 78-92
3. Lakshmi Manasa, Shankara Narayanan Krishna : Determinization of a subclass of timed automata, accepted for presentation at CiE 2009 and to appear in Local proceedings of CiE 2009

4. Lakshmi Manasa, Shankara Narayanan Krishna, Chinmay Jain : Model checking Weighted Integer Reset Timed Automata, Submitted to Journal of Logic and Computation in nov 2008 [result awaited]

Research and Teaching experience :

- Teaching assistantship during 4 semesters of Mtech and 2 semesters of PhD in CSE dept, IIT Bombay
- Collaboration with Prof. Paritosh Pandya, T.I.F.R, Bombay during my Mtech project.
- Research and development project in PhD involved collaboration with Prof. Ramesh and Dr.Ambar Gadkari at General Motors, India Science Lab, Bangalore.
- Lab Visit : General Motors, India Science Lab, Bangalore.
  Invited by : Prof. Ramesh.S
  Duration: Feb 2009 – march 2009
- Lab Visit : LSV-CNRS, Cachan, France
  Invited by : Prof. Serge Haddad
  Duration : May 2009

Project Work:

1. PhD seminar :Model checking Weighted Timed Automata
   GUIDED BY : Prof.Krishna.S.N
   DURATION: july 2008 - dec 2008
   ABSTRACT: study of model checking weighted CTL (WCTL) over Weighted Timed Auomata(WTA). Introduction of a integer reset subclass of WTA (WIRTA) for which model checking of WCTL with no external costs is decidable. Undecidablity of model checking an extended version WCTL over WIRTA. [submitted to JLC 2008]

2. RESEARCH AND DEVELOPMENT PROJECT : Survey of scenario based languages in formal verification
   GUIDED BY : Prof. Krishna.S.N, Prof. Ramesh.S (General Motors,ISL,Bangalore)
   DURATION : july 2008 – dec 2008
   ABSTRACT : concise survey of all chart formalisms such as MSC, LSC, Hybrid charts and CESC and their variants. The focus of the study was mainly analysis problems investigated in literature and also verification applications of these formalisms.

3. MASTERS THESIS: Timed Automata : extensions and decidability
   GUIDED BY : Prof.Krishna.S.N
   DURATION: may 2007 - july 2008
   ABSTRACT: Study of IRTA (Formats paper mentioned above) and updatable timed automata (CiE'08 paper above). Additionally, deciablitiy of updatable IRTA and updatable Alternating-IRTA were studied in detail.

4. RESEARCH AND DEVELOPMENT PROJECT : Study of WTA and model checking of WCTL over Weighted Timed Automata
   GUIDED BY : Prof.Krishna.S.N
   DURATION : aug 2007 - dec 2007
   ABSTRACT : Extensive survey of model-checking problem of WCTL over WTA.

5. MTECH SEMINAR: Study of Timed Automata
   GUIDED BY : Prof.Krishna.S.N
   DURATION : Aug 2006 - dec 2006
   ABSTRACT : Focus was Timed automata proposed by Alur and Dill

6. BTECH PROJECT : SCSI Tape Library Simultaor
   GUIDED BY : HP,Storage Labs
   DURATION : Feb- May 2006
   ABSTRACT : Dealt with the development of a simulator for the behavior of a tape library which responds to commands from the SCSI command set on the Linux platform. This has been implemented by writing a driver for the simulator.

7. BTECH SEMINAR : Semantic Web
   DURATION : Feb- May 2006
   ABSTRACT : Understanding of Semantic web which intends to create a universal medium for information exchange by giving machine readable format to meaning (semantics).

I declare that above given information is correct to the best of my knowledge.

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