Mihir P Mehta

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Objective

Internship in the area of formal verification.

Education

Ph.D. in Computer Science, University of Texas at Austin. (August 2014 - present)

GPA: 3.83/4 (Spring 2015)

B.Tech. in Computer Science and Engineering (CSE), Indian Institute of Technology (IIT) Delhi. (July 2009 - May 2013)

GPA: 7.9/10

Exchange semester, Ecole des Mines, Saint-Etienne. (September 2011 - December

2011)

Experience

Research Assistant, With Professors Isil Dillig and Thomas Dillig, CS department, UT Austin. (2014-2015)

• Worked on program verification in object-oriented languages.

Software Engineer, Samsung Research Institute, Noida, India.

(2013-2014)

- Worked as a researcher in Samsung's Systems Core Group.
- Primarily tasked with optimising the Linux kernel for Samsung's Android devices.
- Improved core components of the Linux virtual memory subsystem.

Undergraduate Thesis

Algorithms for prebisimilarity With Professor S Arun Kumar, CSE Department, IIT Delhi (2012-2013)

- Conceptualised and implemented a toolkit for verifying bisimilarity and other properties of timed automata and labelled transition systems.
- Leveraged UPPAAL model checker to add support for difference bound matrices.
- Improved an algorithm for generating a zone graph from a timed automaton.

Coursework

UT Austin

• CS395T Automated Logical Reasoning	(Spring 2015)
• CS388L Introduction to Mathematical Logic	(Spring 2015)
• CS388S Formal Verification and Semantics	(Fall 2014)
• CS395T Automatic Verification of Software	(Fall 2014)

IIT Delhi (graduate courses only)

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• CSL728 Compiler Design	(Fall 2012)
• CSL705 Theory of Computation	(Spring 2012)
• MAL704 Numerical Optimisation	(Spring 2012)

Scholastic Achievements

- Awarded the UT Austin Graduate School's College Recruitment Fellowship. (2014-2017)
- Secured All India Rank 138 in the Joint Entrance Examination (IIT-JEE) among 400000 candidates.
- Secured All India Rank 29 in the All India Engineering Entrance Examination (AIEEE) among 1000000 candidates. (2009)

• Scored 99 percentile in Verbal and Analytical Reasoning, GRE.

(2012)

Technical Skills

<u>Languages</u>: Imperative languages (C, Python, Java), functional languages (OCaml, SML), scripting languages (Perl, Python, Bash), database interaction languages (SQL), logic programming languages (Prolog), hardware description languages (VHDL).

 $\underline{Databases:}\ PostgreSQL,\ MySQL,\ SQLite.$

Operating systems: GNU/Linux (application development and kernel development).

Compiler frameworks: Soot, LLVM.

Others: OpenGL, GTK+ 2.0 and 3.0, Xilinx, Matlab.