Mihir P Mehta

Department of Computer Science University of Texas at Austin Austin, TX 78712 +1 512-952-0104 mihir@cs.utexas.edu

Objective

Internship in the area of formal verification.

Education

Ph.D. in Computer Science, University of Texas at Austin. (2014 - present)
GPA: 3.83/4 (Spring 2015)
B.Tech. in Computer Science and Engineering (CSE), Indian Institute of
Technology (IIT) Delhi. (2009 - 2013)

GPA: 7.9/10

Exchange semester, Ecole des Mines, Saint-Etienne.

(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)

• CSL728 Compiler Design		(Fall 2012)
• CSL705 Theory of Comput	tation	(Spring 2012)
• MAL704 Numerical Optim	isation	(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. (2009)
- 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 Programming languages: Functional languages (OCaml, SML),

imperative languages (C, C++, Java), scripting languages (Perl, Python, Bash), logic programming languages (Prolog), hardware description languages (VHDL). Operating systems: GNU/Linux (application development and kernel development).

Compiler frameworks: Soot, LLVM.
Others: Xilinx, Matlab, PostgreSQL.

Others

Languages: English, French, Gujarati, Hindi.

Outside of work: I enjoy reading, blogging, swimming, strength training, and playing my guitar.