

Mihir P Mehta

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Education	Ph.D., Computer Science , University of Texas at Austin. (2014 - present) GPA: 3.83/4 (Spring 2015) B.Tech., Computer Science and Engineering , Indian Institute of Technology (IIT) Delhi. (2009 - 2013) GPA: 7.9/10 Exchange semester , Ecole des Mines, Saint-Etienne. (2011)
Professional Experience	Research Intern at Intel Corporation, Austin, TX, USA. (2015) <ul style="list-style-type: none">Built a Pintool to dynamically analyse executables. Augmented the analysis with fine-grained information obtained from static analysis techniques. Software Engineer at Samsung Research Institute, Noida, India. (2013-2014) <ul style="list-style-type: none">Optimised the Linux kernel for Samsung's Android devices.Improved core components of the Linux virtual memory subsystem.
Research Experience	Program verification in object-oriented languages with Professors Isil Dillig and Thomas Dillig, CS department, UT Austin. (2014-2015) <ul style="list-style-type: none">Developed a prototype verifier based on Hoare logic and weakest pre-conditions.Used the Soot compiler framework to generate verification conditions and the Z3 theorem prover to discharge them.Generated example inputs demonstrating bugs in several test programs. Algorithms for bisimilarity with Professor S Arun Kumar, CSE Department, IIT Delhi (2012-2013) <ul style="list-style-type: none">Conceptualised and implemented a toolkit for verifying bisimilarity and other properties of timed automata and labelled transition systems.Improved an algorithm for generating a zone graph from a timed automaton.
Coursework (graduate courses)	<u>UT Austin</u> : Automated Logical Reasoning, Introduction to Mathematical Logic, Formal Verification and Semantics, Automatic Verification of Software. <u>IIT Delhi</u> : Compiler Design, Theory of Computation, Numerical Optimisation.
Technical Skills	<u>Programming languages</u> : Functional languages (OCaml, SML), logic programming languages (Prolog), hardware description languages (VHDL). <u>Operating systems</u> : GNU/Linux (kernel and application development). <u>Compiler frameworks</u> : Soot (Java), LLVM (C++). <u>Others</u> : Xilinx, Matlab, PostgreSQL.
Scholastic Achievements	<ul style="list-style-type: none">Awarded the UT Austin Graduate School's Recruitment Fellowship. (2014-2017)All India Rank 138 (out of 400000), Joint Entrance Examination (IIT-JEE). (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)
Others	<u>Languages</u> : English, French, Gujarati, Hindi.