

Siddhesh Chaubal

Department of Computer Science,
UT Austin, Texas.

Email: siddhesh@utexas.edu
Webpage: <https://siddhesh1.github.io>

RESEARCH INTERESTS

Machine Learning, Transfer Learning, Supervised Learning, Complexity Theory

EDUCATION

The University of Texas at Austin

Expected: December 2020

PhD candidate in Computer Science Department

GPA: 3.96/4.0

Advisor: Prof. Anna Gal

Thesis: Complexity Measures of Boolean Functions and their Applications

Indian Institute of Technology Bombay, Mumbai

July 2009-April 2013

B.Tech. in Computer Science, Minor in Mathematics

GPA: 9.75/10.0

WORK EXPERIENCE

Machine Learning Research Intern

May-Nov 2019

Nokia Bell Labs, Dublin

Topic: *Transfer Learning in Decision Trees*

Research Intern

May-July, 2012

IST Austria

Topic: *Travelling between regular languages*

Research Intern

May-July, 2011

IST Austria

Topic: *Faster Algorithms for Alternating Refinement relations*

PUBLICATIONS

- *Transfer Learning Algorithms for Regression Forests*
Siddhesh Chaubal, Patrick K. Nicholson
Under review, 2020.
- *Transfer Learning in Decision Trees using Geometric Optimization*
Siddhesh Chaubal, Mateusz Rzepecki, Patrick K. Nicholson, Guangyuan Piao, Alessandra Sala
Under review, 2020.
- *Diameter versus Certificate Complexity of Boolean functions*
Siddhesh Chaubal, Anna Gal
Under review, 2020.
- *Tight Bounds on Sensitivity and Block Sensitivity of Some Classes of Transitive Functions*
Siddhesh Chaubal, Anna Gal
Latin American Theoretical Informatics Symposium (LATIN), 2020.
- *New Constructions with Quadratic Separation between Sensitivity and Block Sensitivity*
Siddhesh Chaubal, Anna Gal
Foundations of Software Technology and Theoretical Computer Science (FSTTCS), 2018.
- *How to travel between languages*
Krishnendu Chatterjee, Siddhesh Chaubal, Sasha Rubin
Language and Automata Theory and Applications (LATA), 2013
- *Faster Algorithms For Alternating Refinement Relations*
Krishnendu Chatterjee, Siddhesh Chaubal, Pritish Kamath
Computer Science Logic (CSL), 2012.

AWARDS

- **Graduate School Summer Fellowship** at UT Austin for 2020.
- **Travel award** at UT Austin for FSTTCS 2018.
- **Dean's Excellence Award** at UT Austin for 2013-14.
- The **Institute Academic Prize** at IIT Bombay for excellence in academics for 2010-11 and 2011-12.
- **Dr. Winifred Fernandes fellowship** for standing 3rd in the Computer Science department at IIT Bombay.
- Secured **All India Rank 70** in IIT Joint Entrance Exam 2009 from about 400,000 aspirants.

COURSES COMPLETED AT UT AUSTIN

- | | | |
|----------------------------------|----------------------------|--------------------------------------|
| • Learning Theory | • Coding Theory | • Machine Learning |
| • Randomized Algorithms | • Information Theory | • Programming Languages |
| • Combinatorics and Graph Theory | • Communication Complexity | • Numerical Analysis: Linear Algebra |

TEACHING

Teaching Assistant , Algorithms and Complexity,	Fall '13, Spring '14, Fall '14, Spring '15, Fall '16, Spring '19
Teaching Assistant , Combinatorics and Graph Theory,	Fall '15, Spring '18
Teaching Assistant , Generic Programming,	Summer '16, Summer '17
Teaching Assistant , Software Engineering,	Summer '17, Summer '18
Teaching Assistant , Object Oriented Programming,	Fall '18, Spring '19, Spring '20

MENTORING

Mentored 6 sophomore students as part of the Academic Mentorship Program in the Computer Science department at IIT Bombay in 2012-13.

PROGRAMMING SKILLS

Python, Java, C++, C, Scheme (Lisp), Haskell, MATLAB