Siddhesh Chaubal

Department of Computer Science,
UT Austin, Texas.

Email: siddhesh@cs.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: October 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
Supervisors: Dr. Patrick Nicholson, Dr. Alessandra Sala
Topic: *Transfer Learning in Decision Trees*

Research Intern — May-July, 2012
IST Austria
Supervisors: Prof. Krishnendu Chatterjee, Dr. Sasha Rubin
Topic: *Travelling between regular languages*

Research Intern — May-July, 2011
IST Austria
Supervisor: Prof. Krishnendu Chatterjee
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 and Random Forests*
  Siddhesh Chaubal, Mateusz Rzepecki, Patrick K. Nicholson,Guangyuan Piao, Alessandra Sala
  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

- Recipient of UT Austin **Graduate School Summer Fellowship** for 2020.
- Recipient of **Travel award** at UT Austin for FSTTCS 2018.
- Recipient of the **Dean's Excellence Award** at UT Austin for 2013-14.
- Recipient of the **Institute Academic Prize** at IIT Bombay for excellence in academics for 2010-11 and 2011-12.
- Awarded **Dr. Winifred Fernandes fellowship** for standing 3^{rd} 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
- Randomized Algorithms
- Combinatorics and Graph Theory
- Coding Theory
- Information Theory
- Communication Complexity
- Machine Learning
- Programming Languages
- 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