

# Soroush Alamdari

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Cornell University

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RESEARCH      Exact and Approximate Optimization

EXPERIENCE

- ◊ Scheduling
- ◊ Path Planning
- ◊ Clustering
- ◊ Graph Drawing

EDUCATION

**Cornell University**, Ithaca, New York, USA.      2013 (expected December 2017)  
PhD in Computer Science, advised by David Shmoys  
Thesis: Approximation Algorithms for Combinatorial Problems

**University of Waterloo**, Waterloo, Ontario, Canada.      2010 - 2012  
Master of Mathematics in Computer Science, advised by Threse Biedl  
Thesis: Planar Open Rectangle-of-Influence Drawings

**Sharif University of Technology**, Tehran, Iran.      2006 - 2010  
Bachelor of Science in Computer Engineering, advised by Mohammad Ghodsi  
Thesis: Fast Approximations for Map Labeling in Dynamic Frame

SELECTED

PUBLICATIONS

- ◊ **Drives that Make Small Worlds**,  
*submitted to* ACM-SIAM Symposium on Discrete Algorithms (**SODA 2018**).
- ◊ **A Bicriteria Approximation Algorithm for the k-center and k-median problems**,  
With David Shmoys,  
Workshop on Approximation and Online Algorithms (**WAOA 2017**).
- ◊ **Smart-grid Electricity Allocation via Strip Packing with Slicing**,  
With Therese Biedl, Timothy M. Chan, Elyot Grant, Krishnam Raju Jampani, Srinivasan Keshav, Anna Lubiw and Vinayak Pathak,  
Algorithms and Data Structures Symposium (**WADS 2013**).
- ◊ **Morphing Planar Graph Drawings with a Polynomial Number of Steps**,  
With Patrizio Angelini, Timothy M. Chan, Giuseppe Di Battista, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson,  
ACM-SIAM Symposium on Discrete Algorithms (**SODA 2013**).
- ◊ **Self-Approaching Graphs**,  
With Timothy Chan, Elyot Grant, Anna Lubiw, and Vinayak Pathak,  
International Symposium on Graph Drawing (**GD 2012**).
- ◊ **Open Rectangle-of-Influence Drawings of Non-Triangulated Planar Graphs**,  
With Therese Biedl,  
International Symposium on Graph Drawing (**GD 2012**).
- ◊ **Persistent Monitoring in Discrete Environments: Minimizing the Maximum Weighted Latency Between Observations**,  
With Elaheh Fata and Stephen L. Smith,  
International Workshop on the International Journal of Robotics Research (**WAFR 2012, IJRR**).
- ◊ **On Inapproximability of a DAG Partitioning Problem**,  
With Abbas Mehrabian,  
Workshop on Algorithms and Models for the Web Graph (**WAW 2012**).

AWARDS	◇ Awarded as <b>Outstanding Teaching Assistant</b> ,	2014
	◇ Recipient of UW <b>Special Graduate Scholarship</b> ,	2011
	◇ Awarded as <b>Outstanding Student</b> by university president,	2008
	◇ Recipient of the <b>Special Grant of the National Foundation of Elites</b> ,	2007 - 2010
	◇ <b>Gold Medal</b> in Iranian National Olympiad in Informatics,	2005
SERVICE	<b>Cornell University:</b>	Ithaca, New York, United States
	◇ <b>Teaching</b>	
	– Fundamental Programming Concepts,	Summer 2015, 2016, 2017
	◇ <b>Research Assistant</b>	
	– For David Shmoys	Summer and Fall 2015
	◇ <b>Teaching Assistant</b>	
	– Analysis of Algorithms	Fall 2017
	– Advanced Optimization	Spring 2016, Fall 2017
	– Networks,	Fall 2014
	– Fundamental Programming Concepts,	Summer 2014
	– Introduction to Computing Using Python,	Spring 2014
	– Software Engineering,	Fall 2013
	– Object-Oriented Programming and Data Structures,	Summer 2013
	– Introduction to Analysis of Algorithms,	Spring 2013, 2015
	<b>Altera Corporation:</b>	Toronto, Ontario, Canada
	◇ <b>Advanced Design Engineer</b>	2012-2013
	<b>University of Waterloo:</b>	Waterloo, Ontario, Canada
	◇ <b>Research Assistant</b>	
	– For Timothy Chan	Summer 2012
	– For Therese Biedl	Fall 2010 - Spring 2012
	◇ <b>Teaching Assistant</b>	
	– Designing Functional Programs,	Fall 2010 and Winter 2011
	– Algorithms,	Winter 2011, Spring 2011, Fall 2011, Winter 2012
	– Data Mining,	Fall 2011
	<b>Sharif University of Technology:</b>	Tehran, Iran
	◇ <b>Teaching Assistant</b>	
	– Design and Analysis of Algorithms,	Spring 2009 and Winter 2009
	– Data Structure and Algorithms,	Fall 2008
	<b>Young Scholars Club:</b>	Tehran, Iran
	◇ <b>Teacher and Commete Member</b>	2007 - 2010