

CONTACT  
INFORMATION

alice\_paul@brown.edu

ACADEMIC  
APPOINTMENTS

**Assistant Professor of Biostatistics, Teaching Scholar**  
Brown University, 2020–Current.

**Assistant Professor of Applied Mathematics and Computer Science**  
Franklin W. Olin College of Engineering, 2019–2020.

**Postdoctoral Research Associate**

Department of Biostatistics and the Data Science Initiative, Brown University, 2017–2019.  
Advised By: Pedro Felzenszwalb.

## EDUCATION

**Cornell University**, Ithaca, NY.

**Ph.D.** Operations Research and Information Engineering, August 2017.  
Advised By: David P. Williamson.

**Harvey Mudd College**, Claremont, CA.

**B.S.** Mathematics with High Distinction, May 2012.

## PUBLICATIONS

**Alice Paul** and David Williamson. *Easy Capacitated Facility Location Problems, with Connections to Lot-Sizing*, forthcoming in *Operations Research Letters*, 2020.

**Alice Paul**, Daniel Freund, Aaron Ferber, David Shmoys, and David Williamson. *Budgeted Prize-Collecting Traveling Salesman and Minimum Spanning Tree Problems*, *Mathematics of Operations Research*, 2019.

Amariah Becker and **Alice Paul**. *A Framework for Vehicle Routing Approximation Algorithms in Trees*, *Algorithms and Data Structures Symposium*, 2019.

Jacob Feldman, **Alice Paul**, and Huseyin Topaloglu. *Technical Note: Assortment Optimization with Small Consideration Sets*, *Operations Research*, 2019.

Jacob Feldman and **Alice Paul**. *Relating the Approximability of the Fixed Cost and Space Constrained Assortment Problems*, *Production and Operations Management*, 2018.

**Alice Paul**, Daniel Freund, Aaron Ferber, David Shmoys, and David Williamson. *Prize-Collecting Traveling Salesman with a Budget Constraint*, *European Symposium on Algorithms*, 2017.

**Alice Paul**, Jacob Feldman, and James Mario Davis. *Assortment Optimization and Pricing under a Nonparametric Tree Choice Model*, *Manufacturing and Service Operations Management*, 2017.

**Alice Paul**, Matthias Poloczek, and David P. Williamson. *Simple Approximation Algorithms for Balanced MAX 2SAT*, *Algorithmica*, 2017.

**Alice Paul**, Matthias Poloczek, and David P. Williamson. *Simple Approximation Algorithms for Balanced MAX 2SAT*, *Latin American Theoretical Informatics Symposium*, 2016.

**Alice Paul** and Nicholas Pippenger. *A Census of Vertices by Generations in Regular Tessellations of the Plane*, *Electronic Journal of Combinatorics*, 2011.

BOOK CHAPTERS	<p><b>Alice Paul</b> and Susan Martonosi. <i>Operations Research</i>, in Nathan Carter (ed.), <i>Data Science for Mathematicians</i>, 2020.</p> <p>Daniel Freund, Ashkan Norouzi-Fard, <b>Alice Paul</b>, Shane Henderson and David B. Shmoys. <i>Data-Driven Rebalancing Methods for Bike-Share Systems</i>, in E. Christofoni et al. (ed.), <i>Analytics for the Sharing Economy: Mathematics, Engineering, and Business Perspectives</i>, 2020.</p>	
PREPRINTS		
INVITED PRESENTATIONS	<p>“Iterative Algorithms for Semidefinite Programming,” American Mathematical Society Eastern Sectional Meeting, forthcoming 2021.</p> <p>“Prize-Collecting TSP with a Budget Constraint,” International Symposium on Math Programming, 2018.</p> <p>“Data-Driven Optimization for Bike-Share Systems,” Data Science Initiative Colloquium, Brown University, 2017.</p> <p>“Prize-Collecting TSP with a Budget Constraint,” European Symposium on Algorithms, 2017.</p> <p>“Assortment Optimization for Choosy Customers,” INFORMS, 2016.</p> <p>“Assortment Optimization for Choosy Customers,” INFORMS Revenue Management and Pricing Conference, 2016.</p> <p>“Simple Approximation Algorithms for Balanced MAX 2SAT,” LATIN, 2016.</p> <p>“Revenue Management under a Nonparametric Ranking-Based Choice Model,” INFORMS, 2015.</p> <p>“Detecting Covert Members of Terrorist Networks,” Young Women in Discrete Math, 2013.</p> <p>“Detecting Covert Members of Terrorist Networks,” INFORMS, 2012.</p>	
TEACHING EXPERIENCE	<p><b>PHP 1560/2560: Statistical Programming in R</b>, Brown University, FA 2020.</p> <p><b>ENGR 3599: Data Structures and Algorithms</b>, Olin College, SP 2020.</p> <p><b>MTH 1111/SCI 1111: Modeling and Simulation of the Physical World</b>, Olin College, FA 2019.</p> <p><b>DATA 2020: Probability, Statistics, and Machine Learning</b>, Brown University, SP 2019.</p> <p><b>DATA 2020: Probability, Statistics, and Machine Learning</b>, Brown University, SP 2018.</p> <p><b>ENGRI 1101: Engineering Applications of Operations Research</b>, Cornell University, FA 2016.</p> <p><b>ORIE 3310: Optimization II</b>, Cornell University, SU 2015.</p>	
ADVISING AND MENTORING	<p>Manu Patil, Undergraduate Research Student, Olin College, Spring 2020.</p> <p>Cassandra Overney, Undergraduate Research Student, Olin College, Fall 2019-Spring 2020.</p> <p>Victoria McDermott, Independent Study, Olin College, Fall 2019.</p> <p>Pravallika Dhulipalla, Independent Study, Olin College, Fall 2019.</p> <p>Emily Jaekle, Masters Capstone Advisor, Brown University, Summer 2018.</p> <p>Sibel Kadioglu, Masters Capstone Advisor, Brown University, Summer 2018.</p> <p>Daniel Suh, Undergraduate Research Student, Brown University, Summer 2018.</p>	
HONORS AND AWARDS	<p>NDSEG Fellow</p> <p>INFORMS Undergraduate Research Prize 2012</p> <p>ORIE Teaching Assistant of the Year 2013-2014</p>	<p>Sage Diversity Fellowship</p> <p>Sherrri Koenig Stuewer Graduate Fellowship</p> <p>Harvey S. Mudd Scholar</p>
REVIEWER	<p>Operations Research, Algorithmica, Operations Research Letters, Mathematical Programming, SIAM Journal of Discrete Mathematics, Probability in the Engineering and Informational Sciences.</p>	