

## CONTACT INFORMATION

[alice\\_paul@brown.edu](mailto: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

Pedro Felzenszwalb, Caroline Klivans, and **Alice Paul**. *Iterated Linear Optimization*, Quaterly of Applied Mathematics, 2021.

**Alice Paul** and David Williamson. *Easy Capacitated Facility Location Problems, with Connections to Lot-Sizing*, 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. Chrisotomi et al. (ed.), <i>Analytics for the Sharing Economy: Mathematics, Engineering, and Business Perspectives</i>, 2020.</p>
PREPRINTS	<p>Pedro Felzenszwalb, Caroline Klivans, and <b>Alice Paul</b>. <i>Clustering with Iterated Linear Optimization</i>, 2020.</p> <p>Cassandra Overney and <b>Alice Paul</b>. <i>The Relationship between Public Transit and Bikeshare Ridership: Case Studies in Boston, Philadelphia, and Washington DC</i>, 2020.</p>
INVITED PRESENTATIONS	<p>“Iterative Algorithms for Semidefinite Programming,” American Mathematical Society Eastern Sectional Meeting, 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>PHP 2650: Statistical Learning and Big Data, Brown University, SP 2021, SP 2022.</p> <p>DATA 2020: Statistical Learning, Brown University, SP 2018, SP 2019, SP 2022.</p> <p>PHP 1560/2560: Statistical Programming in R, Brown University, FA 2020, FA 2021.</p> <p>PHP 2550: Practical Data Analysis, Brown University, FA 2020, FA 2021.</p> <p>ENGR 3599: Data Structures and Algorithms, Olin College, SP 2020.</p> <p>MTH 1111/SCI 1111: Modeling and Simulation of the Physical World, Olin College, FA 2019.</p> <p>ENGRI 1101: Engineering Applications of Operations Research, Cornell University, FA 2016.</p> <p>ORIE 3310: Optimization II, Cornell University, SU 2015.</p>
ADVISING AND MENTORING	<p>Kyran Flynn, Undergraduate Research Student, Brown University, Spring 2022.</p> <p>Tobias Dekara, Biostatistics Masters Thesis, Brown University, Fall 2021-Spring 2022.</p> <p>Cassandra Overney, Undergraduate Research Student, Olin College, Fall 2019-Spring 2021.</p> <p>Manu Patil, Undergraduate Research Student, Olin College, 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>
SERVICE	<p>Online MPH Teaching Scholar Search, Fall 2021-Current.</p> <p>Biostatistics Teaching Scholar Search Committee, Fall 2021-Current.</p> <p>Data Science Advisory Board, Fall 2021-Current.</p> <p>Online MPH Faculty Advisory Committee, Fall 2021 - Current.</p> <p>Biostatistics Academic Program Committee, Fall 2021 - Current.</p> <p>Masters in Biostatistics Admission Committee. Department of Biostatistics, Brown University, Spring 2021-Current.</p> <p>Masters of Public Health Admissions Committee. School of Public Health, Brown University, Spring 2021.</p>

TEACHING TRAINING	<p>Sheridan Center Junior Faculty Teaching Fellows Program. Brown University, Fall 2020 - Spring 2021.</p> <p>Sheridan Center Anchor Program. Brown University, Fall 2020.</p>
REVIEWER	<p>Production and Operations Management, Operations Research, Algorithmica, Operations Research Letters, Mathematical Programming, SIAM Journal of Discrete Mathematics, Probability in the Engineering and Informational Sciences.</p>