## Saul Toscano-Palmerin

CONTACT Information 265 Rhodes Hall Cornell University Ithaca, NY 14853

st684@cornell.edu http://toscanosaul.github.io/saul/

(607)379-1389

RESEARCH INTERESTS

Simulation optimization, Bayesian optimization, optimal learning, machine learning, sequential decision-making and transportation systems.

#### **EDUCATION**

## Cornell University, USA

Ph.D. in Operations Research and Information Engineering, GPA: 4.191/4.3, expected May 2018

- Advised by Peter I. Frazier
- Minors: Computer Science and Statistics

#### CIMAT-Center for Mathematical Research, Mexico

B.A. in Mathematics, GPA: 9.71/10, June 2013

- Highest GPA of the class 2008-2013
- Excellence Fellowship awarded by the Mexican government

## Industry Experience

#### Uber, USA

Data Scientist Intern, June 2016 - June 2017

- Route-based pricing for uberX and uberPOOL
- Skills: Optimization and statistical methods, machine learning algorithms, design of experiments, production code

### Papers

- S. Toscano-Palmerin and P.I. Frazier, "Asymptotic Validity of the Bayes-Inspired Indifference Zone Procedure: the Non-Normal Known Variance Case", Winter Simulation Conference, 2015. http://arxiv.org/pdf/1508.07720.pdf
- S. Toscano-Palmerin and P.I. Frazier, "Stratified Bayesian Optimization", MCQMC Conference, 2016. https://arxiv.org/abs/1602.02338
- S. Toscano-Palmerin and P.I. Frazier, "Demand Learning for Facility Location and Ridesharing System Design", working paper (available on request).

# WORK IN PROGRESS

"Bayesian Optimization of Expensive Noisy Functions for Multi-Task Learning, Simulation-Based Objectives, and Random Environmental Conditions" with P.I. Frazier.

#### AWARDS

2014–2015 Mexican Government Fellowship 2013–2014 McMullen Fellowship

#### Teaching

# Cornell University, Instructor

- Big Data Technologies (ORIE 5270), Spring 2018, Masters level. Topics: Statistical and software tools for data mining of massive datasets, graphical display, and machine learning.
- Computational Methods in Operations Research (ORIE 6125), Spring 2018, PhD level. Topics: Computational tools to perform research in operations research and related fields.

Software	Bayesian Global Optimization (BGO) Package Python-based Bayesian global optimization software. https://github.com/toscanosaul/stratified_bayesian_optimization	
	New York City's Citi Bike System Simulation Python-based queuing simulation based on New York City's Citi Bike system. https://github.com/toscanosaul/BGO/tree/master/CitiBike	
Graduate Coursework	<ul> <li>□ Machine Learning</li> <li>□ Statistical Principles</li> <li>□ Bayesian Statistics</li> <li>□ Simulation</li> <li>□ Applied Stochastic Processes</li> </ul>	<ul> <li>□ Combinatorial Optimization</li> <li>□ Mathematical Programming I and II</li> <li>□ Parallel Computing</li> <li>□ Asset Pricing</li> </ul>
RELEVANT SKILLS	Development: Python, Java, R, C, C++, Matlab, Hadoop/Hive/Spark/PySpark/MLlib, SQL Languages: English, Spanish.	