

## Ryan Cory-Wright

Operations Research Center  
Massachusetts Institute of Technology  
77 Massachusetts Avenue, E40-103  
Cambridge, MA 02139  
Website: [ryancorywright.github.io](http://ryancorywright.github.io)

Email: [ryancw@mit.edu](mailto:ryancw@mit.edu)  
70 Pacific St  
Cambridge, 02139

---

**Education**      **Massachusetts Institute of Technology**, Cambridge, MA  
Candidate for PhD in Operations Research; expected completion, June 2021. GPA: 5.0  
Advisor: Prof. Dimitris Bertsimas

**University of Auckland**, Auckland, New Zealand  
BE (Hons) in Engineering Science, May 2017. GPA 8.84/9.00.  
Thesis title: *Pricing Wind Under Uncertainty*  
Advisors: Profs. Andy Philpott and Golbon Zakeri.  
Completed in three years via the accelerated pathway program; a highly intensive program which comprises direct entry to part II and three additional courses per year.

### Work and Research Experience

**2017-Present**      **Massachusetts Institute of Technology**, Cambridge, MA  
*Research Assistant*  
Advisor: Dimitris Bertsimas  
Developing scalable algorithms for solving mixed-integer quadratic programs exactly. More generally, working on providing high-quality interpretable solutions to problems which arise at the intersection of optimization and machine learning.

**2016-2017**      **University of Auckland**, Auckland, New Zealand  
*Research Assistant*  
Advisor: Golbon Zakeri  
Worked on methods for incorporating intermittent renewable energy into wholesale electricity markets via stochastic optimization. This comprised back-testing a stochastic dispatch mechanism on the New Zealand Electricity Market, and measuring the impact which changing the dispatch mechanism would have; on both the aggregate system and individual participants.

**2014-2016**      **Derceto Ltd**, Auckland, New Zealand  
*Assistant Optimization Engineer*  
Assisted with installing a pump-scheduling optimization tool for two municipal water providers. Created a VBA/SQL tool to automate a 9-step process for updating historical demand curves, which currently saves Derceto 30 hours per client per year. Upgraded several other VBA tools.

### Publications

*"Payment mechanisms for electricity markets with uncertain supply"*, with Andy Philpott and Golbon Zakeri, Operations Research Letters. **46**(1):116-121, 2018. <https://doi.org/10.1016/j.orl.2017.11.017>

*"Who benefits from stochastic dispatch?"*, with Golbon Zakeri, working paper.

## **Presentations**

*"Stochastic Scheduling Pricing and Dispatch"*, with Golbon Zakeri and Andy Philpott, presented at the EPOC mini workshop, July 2017.

*"Cost-Recovering, Revenue-Adequate Single-Settlement Schemes for Electricity Markets"*, with Andy Philpott and Golbon Zakeri, presented at ORSNZ, December 2016.

## **Honors and Awards**

- 2016** Operations Research Society of New Zealand Young Practitioner Prize Competition, 1<sup>st</sup> Place  
"Cost-Recovering, Revenue-Adequate Single-Settlement Schemes for Electricity Markets", with Andy Philpott and Golbon Zakeri.  
For the best conference paper by a presenter within 5 years of graduation.
- 2016** Senior Scholar Award, University of Auckland  
For the highest GPA within graduating students in Engineering Science.
- 2014-2016** Deans Honours List x3, Faculty of Engineering, University of Auckland  
For earning a GPA within the top 5% of students in Engineering Science in a calendar year.
- 2014-2016** First in Course Award x5, University of Auckland  
For earning the highest mark in a course at the University of Auckland.
- 2013** NZQA Outstanding Scholar Award  
For placing in the top 50 students in the 2013 NZQA scholarship exams.

## **Skills and Activities**

*Programming Languages:* Julia, R, SQL, MATLAB, C++, HTML, CSS.

*Optimization Software:* JuMP, AMPL, GAMS, Gurobi, CPLEX.

*Software:* LaTeX, InDesign, Photoshop.

*Languages:* English (native), French (conversational), German (beginner).

*Extracurriculars:* Skiing, Running, Hiking, Water Polo.

- Citizenship** Citizen of New Zealand, Ireland.