Ryan Cory-Wright

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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 an extra three electives per year.

Work and Research Experience

2017-Present **Massachusetts Institute of Technology,** Cambridge, MA
Research Assistant
Advisor: Dimitris Bertsimas
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 (accepted), 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 Mechanisms 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, 1st Place
"Cost-Recovering Revenue-Adequate Single-Settlement Mechanisms for Electricity Markets", with Andy Philpott and Golbon Zakeri.
Awarded for the best ORSNZ conference paper by a presenter within 5 years of graduation, joint NZSA+ORSNZ conference, 2016.

2016 Senior Scholar Award, University of Auckland
Awarded for the highest GPA amongst graduating students within my specialization.

2014-2016 Deans Honours List, Faculty of Engineering, University of Auckland
Awarded for earning a GPA within the top 5% of students in my specialization in all three years of my degree.

2014-2016 First in Course Award x5, University of Auckland
Awarded for earning the highest mark in a course at the University of Auckland.

2013 NZQA Outstanding Scholar Award
For placing within the top 50 high-school students in New Zealand 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.
Coursework: optimization (linear, integer, under uncertainty, nonlinear), machine learning.
Languages: English (native), French (conversational), German (beginner).
Extracurriculars: skiing, running, hiking, waterpolo.

Citizenship Citizen of New Zealand, Ireland