

Ryan CORY-WRIGHT

PERSONAL DATA

ADDRESS: 28 Croydon Road Mt Eden, Auckland, New Zealand 1024
PHONE: +64 2102201466
EMAIL: rcor538@aucklanduni.ac.nz
LINKEDIN: nz.linkedin.com/in/RyanCoryWright

PERSONAL PROFILE

EDUCATION

MAY 2017 Bachelor of Engineering (Hons) in ENGINEERING SCIENCE | GPA: 8.84/9.00
The University of Auckland, Auckland | Major: Operations Research.
Thesis: "Pricing Wind Under Uncertainty".
Supervisors: Andy Philpott, Golbon Zakeri.

Completed via the Accelerated Pathway: a highly intensive program with direct entry to part II and an extra three electives per year.
Graduated with highest honours.

PUBLICATIONS

MARCH 2017 With Andy Philpott and Golbon Zakeri, *On payment mechanisms for electricity markets with uncertain supply*, In: Preprint, Available at:
<http://www.epoc.org.nz/papers/CoryWright2017.pdf>.

SCHOLARSHIPS, AWARDS AND CERTIFICATES

DECEMBER 2016	Senior Scholar Award. Awarded for the highest GPA amongst graduating students in my undergraduate degree.
DECEMBER 2014 – 2016	Deans Honours List for a GPA of 8.84/9.00. This places me in the top 3 students in my specialisation.
NOVEMBER 2016	ORSNZ Young Practitioner Prize, for best ORSNZ conference paper by a presenter within five years of graduation.
JULY 2016	1 st in course award Engineering Science 761 (Integer Programming).
DECEMBER 2015	1 st in course award Engineering Science 363 (Modelling and Design 2). 1 st in course award Philosophy 105 (Critical Thinking).
JULY 2015	1 st in course award Engineering Science 314 (Mathematical Modelling 3).
DECEMBER 2014	1 st in course award Mechanical Engineering 211 (Thermofluids).
DECEMBER 2013	NZQA Outstanding Scholar Award For Outstanding Scholarships in Calculus and Statistics, and Scholarship in Physics. This places me in the top 50 high school students in New Zealand in 2013.

WORK EXPERIENCE

Nov 2016-JULY 2017	<p>Research Assistant at The Department of Engineering Science, The University of Auckland, Auckland. Supervisor: Dr Golbon ZAKERI. <i>Investigating Stochastic Dispatch Mechanisms in Electricity Markets.</i></p> <p>This involves using the modelling language GAMS, the LP solver CPLEX and a replica of the software used to clear the New Zealand Electricity Market, to investigate the performance of stochastic dispatch mechanisms in risk-neutral and risk-averse settings.</p>
NOV 2015-FEB 2016 NOV 2014-FEB 2015	<p>Assistant Optimisation Engineer at DERCETO LTD, Auckland. <i>Water Utility Network Optimization.</i></p> <p>Gained 1040 hours experience at a water utility optimization software provider, over the course of two summers. This involved adding value by:</p> <ul style="list-style-type: none"> • Creating a VBA/SQL tool to automate a 9-step process for updating historical demand curves. This tool currently saves Derceto around 30 hours per client per year. • Assisting with installing Aquadapt (Derceto's pump scheduling optimisation software) for two of Derceto's clients. This involved using SQL and VBA to populate the database used by the LP solver XPRESS. • Upgrading a debug file reader, resulting in its run time improving from 5 minutes per file to 10 seconds per file. This has streamlined on-site debugging substantially. • Overhauling a VBA tool which optimises a pump station using historical data, to estimate the savings which can be achieved by purchasing Aquadapt (Derceto's pump scheduling optimisation software). This has reduced the runtime of the tool from 15 minutes to 30 seconds per pump station. • Performing regression testing on new versions of Aquadapt. This involved interfacing with XPRESS and comparing the quality of solves.

LANGUAGES

ENGLISH: Native.
 FRENCH: Intermediate.
 GERMAN: Basic Knowledge.

COMPUTER SKILLS

Proficient: AMPL, R, C, C++, InDesign, Photoshop, Java, Prolog.
 Experienced: VBA, Matlab, GAMS, \LaTeX , SQL.

INTERESTS AND ACTIVITIES

Skiing, Running, Debating, Waterpolo,
 Programming, Mathematics, Operations Research.