

Rebecca Gray

CONTACT INFORMATION Department of Mechanical and Aerospace Engineering (609) 375-7956
Princeton University rgray@princeton.edu
Princeton
NJ 08540 USA

EDUCATION **Princeton University, USA**

Ph.D. Candidate in Mechanical and Aerospace Engineering (expected May 2019)
M.A. in Mechanical and Aerospace Engineering, September 2016
Dynamical Control Systems Laboratory

University of Canterbury, New Zealand

B.E.(Hons) in Mechanical Engineering, December 2013
First Class Honours

SCIENTIFIC RESEARCH EXPERIENCE

- 2014-present Graduate Research Assistant, **Princeton University, USA.**
Advisor: Prof. Naomi Leonard,
Department of Mechanical and Aerospace Engineering.
Investigating nonlinear modelling of bio-inspired decentralised collective decision-making.
- 2013 Independent Research Project, **University of Canterbury, NZ.**
Advisors: Dr Paul Docherty, Dis. Prof. Geoff Chase,
Department of Mechanical Engineering.
Investigating a novel adaption to the Gauss-Newton parameter identification method.
- 2013 Honours Group Thesis, **University of Canterbury, NZ.**
Advisor: Prof. Susan Krumdieck,
Department of Mechanical Engineering.
Conducting a feasibility study for an Organic Rankine Cycle turbine test bed and prospecting tool.

PUBLICATIONS

- Gray, R., Franci, A., Srivastava, V. and Leonard, N.L. (2017). *An agent-based framework for bio-inspired value-sensitive decision-making*. To be presented in Toulouse, France: IFAC, 9-14 Sept 2017.
- Gray, R., Franci, A., Srivastava, V. and Leonard, N.L. (2017). Distributed multi-agent dynamics for bio-inspired value-sensitive decision-making. *IEEE Transactions on Control of Network Systems*. In review.
- Gray, R.A.L., Docherty, P.D., Fisk, L.M. and Murray, R. (2016). A modified approach to objective surface generation within the Gauss-Newton parameter identification to ignore outlier data points. *Biomedical Signal Processing and Control*, 30, 162-169.
- Docherty, P.D., Gray, R.A.L. and Mansell, E.J. (2014). *Reducing the Effect of Outlying Data on the Identification of Insulinaemic Pharmacokinetic Parameters with an Adapted Gauss-Newton Approach*. Cape Town, South Africa: IFAC, 24-29 Aug 2014.

TEACHING EXPERIENCE	2016	Assistant in Instruction, Automatic Control
	2009	Teaching Assistant, Engineering Mechanics
HONORS AND AWARDS	2015	New Zealand Federation of Graduate Women Fellowship
	2014	Fulbright Graduate Student Award J R Templin Travelling Scholarship
	2011	College House Lyall Holmes Memorial Scholarship & George T Weston Scholarship
	2010	University of Canterbury Emerging Leaders Scholarship
RELEVANT SKILLS	Languages:	English