Tom Logan

Department of Civil and Natural Resources Engineering
University of Canterbury
New Zealand

Email: tom.logan@canterbury.ac.nz
Web: https://tomlogan.co.nz
Web: https://reckoningrisk.com

EDUCATION

Ph.D. Industrial and Operations Engineering, University of Michigan, Ann Arbor, 2019

M.S. Geography and Environmental Engineering, Johns Hopkins University, 2015

B.S. Mathematics, University of Canterbury, 2014

B.E. Natural Resources Engineering with First Class Honours, University of Canterbury, 2013

ACADEMIC APPOINTMENTS

2019– University of Canterbury
Lecturer, Department of Civil and Natural Resources Engineering

RESEARCH AREAS

Risk science, statistical modeling, agent-based and complex-system modeling, data analytics, resilience assessment

Climate change adaptation, urban planning, civil systems engineering, coupled natural-human systems

PUBLICATIONS

Articles in Peer-Reviewed Journals

2020 Logan, T. M., & Guikema, S. D. "Reframing Resilience: Equitable Access to Essential Services." *Risk Analysis*, doi:10.1111/risa.13492

2019 Logan, T. M., Williams, T. G., Nisbet, A. J., Liberman, K. D., Zuo, C. T., & Guikema, S. D. "Evaluating urban accessibility: leveraging open-source data and analytics to overcome existing limitations." *Environment and Planning B: Urban Analytics and City Science*, 46(5), 897–913. doi:10.1177/2399808317736528

2019 Bordley, R. F., Keisler, J. M., & Logan, T. M. "Managing projects with uncertain deadlines." *European Journal of Operational Research*, 274(1), 291–302. doi:10.1016/j.ejor.2018.09.036

2018 Logan, T. M., Guikema, S. D., & Bricker, J. D. "Hard-adaptive measures can increase vulnerability to storm surge and tsunami hazards over time." *Nature Sustainability*, 1(9), 526–530. doi:10.1038/s41893-018-0137-6

2016 Logan, T. M., McLeod, S., & Guikema, S. "Predictive models in horticulture: A case study with Royal Gala apples." *Scientia Horticulturae*, 209, 201–213. doi:10.1016/j.scienta.2016.06.033

Other publications

2017   Logan, T. M., and Arnott, J. "You've got the power." *Nature* 551, 531. doi: 10.1038/d41586-017-07261-1

GRANTS AND AWARDS

Awards and Honors

2020   ProQuest Distinguished Dissertation Award Honorable Mention, University of Michigan

2019   Distinguished Leadership Award, College of Engineering, University of Michigan

2019   J X Kasperson Student Paper Award, American Association of Geographers Annual Meeting

2017   Bonder Fellowship Honourable Mention, Industrial & Operations Engineering, University of Michigan

2016   Poster prize, Michigan Student Symposium for Interdisciplinary Statistical Sciences

2016   Poster prize, Michigan Engineering Graduate Symposium

2012   Environment Canterbury Prize in Natural Resources Engineering

2012   Tonkin & Taylor Prize for Hydrology and Hydraulic Engineering

2011   First Prize in Sophomore Civil & Natural Resource Engineers' Communication Portfolio

2010   Emerging Leaders' Scholarship, University of Canterbury

Grants and Fellowships

2020   Te Hiranga Rū QuakeCoRE Proposal Development Grant

2018   Rackham Predoctoral Fellowship, University of Michigan

2017   University of Michigan Travel Grant

2017   University of Michigan Professional Development Grant

2017   University of Michigan Professional Development Grant

2014   Gordon Croft Fellowship, Environment, Energy, Sustainability, Health Institute, Johns Hopkins University

2014   Dean Robert H. Roy Fellowship, Johns Hopkins University

2013   Fulbright New Zealand Science and Innovation Graduate Award

2013   John R Templin Trust Postgraduate Scholarship

2013   Allan Wilson Centre Research Scholarship

2010   Mathematics Research Scholarship, University of Canterbury

TEACHING EXPERIENCE

University of Canterbury

ENCI630   Predictive Analytics for Civil and Environmental Engineering
ENCN375   Sustainable Engineering for a Changing Climate

University of Michigan, Ann Arbor

IOE460   Decision Analysis

SERVICE

Editorial Board

Journal of Infrastructure Systems

Journal Peer Review

Journal of Risk Analysis
Journal of Infrastructure Systems
Cities
Environment and Planning B: Urban Analytics and City Science

PROFESSIONAL AFFILIATIONS

Society for Risk Analysis
Society for Risk Analysis, Australia New Zealand

PROFESSIONAL EXPERIENCE

2018	One Concern, Resilience Data Scientist Palo Alto, California
2016	First Quartile Consulting, Data Consultant USA
2012	Beca Infrastructure Ltd., Engineering Technician Christchurch, New Zealand
2011	Fulton Hogan, Student Engineer Christchurch, New Zealand
2011	Abley Transport, Technical Assistant Christchurch, New Zealand
2011–13	Student Bookshelf, Director Christchurch, New Zealand

TECHNICAL SKILLS

Programming

Python, R, Bash, SQL, PostGreSQL, PostGIS, HTML, Git, Docker, LaTeX

Tools/Applications

MATLAB, Adobe CS, ArcGIS

Updated April 2020