Tom Logan

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Academic: https://tomlogan.co.nz
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Blog: 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

2020 Williams, T. G., Logan, T. M., Zuo, C. T., Liberman, K. D., & Guikema, S. D. "Parks and safety: a comparative study of green space access and its inequities in five US cities." *Landscape and Urban Planning.* doi:10.1016/j.rse.2020.111861

2020 Logan, T. M., Zaitchik, B., Guikema, S., & Nisbet, A. "Night and day: The influence and relative importance of urban characteristics on remotely sensed land surface temperature." *Remote Sensing of Environment*, 247, 111861. doi:10.1016/j.rse.2020.111861

2020 Marasco, D., Murray-Tuite, P., Guikema, S., & Logan, T. "Time to leave: an analysis of travel times during the approach and landfall of Hurricane Irma." *Natural Hazards.* doi:10.1007/s11069-020-04093-7

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

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