CURRICULUM VITAE

DAVID D. O'GARA

Washington University in St. Louis
Division of Computational and Data Sciences
St. Louis, MO 63130

david.ogara@wustl.edu
847-987-1239
sites.wustl.edu/davidogara

EDUCATION

WASHINGTON UNIVERSITY IN ST. LOUIS St. Louis, MO

2026 (Expected)	**Doctor of Philosophy,** Computational and Data Sciences
2018	**Master of Science,** Systems Science and Mathematics
2018	**Bachelor of Applied Science,** Systems Science and Engineering

PROFESSIONAL EXPERIENCE

August 2021 - Present — **Graduate Research Assistant,** Division of Computational and Data Sciences, Washington University
Advisor: Ross A. Hammond

- Research area(s): Agent Based Modeling, Systems Science for Public Health, Computational Epidemiology
- Projects: TRACE model of COVID-19, used to inform public health interventions in U.S.

January 2021 - Present — **Graduate Research Assistant,** Division of Computational and Data Sciences, Washington University
Advisor: Jr-Shin Li

- Research area(s): Application of Dynamics and Control to Agent Based Modeling
- Developing tools to efficiently search for optimal public health interventions using a control-theoretic framework

March 2019 – May 2021	**Analyst,** Analysis Group, Inc., Denver CO and Chicago, IL
June 2018 – August 2018	**Data Science Intern,** Boeing, St. Louis, MO
May 2017 – July 2017	**Investment Analytics and Data Intern,** Dimensional Fund Advisors, Charlotte, NC
June 2016 – August 2016	**Marketing Services and Operations Intern,** Optum, Eden Prairie, MN

PUBLICATIONS

**Denotes equal contribution*

1. Yu, Y.-C., Zhang, W., **O'Gara, D.**, Li, J.-S., & Chang, S.-H. (2023). A moment kernel machine for clinical data mining to inform medical decision making. *Scientific Reports*, *13*(1), 10459. https://doi.org/10.1038/s41598-023-36752-7
2. **O'Gara, D.***, Rosenblatt, S. F.*, Hébert-Dufresne, L., Purcell, R., Kasman, M., Hammond, R. A., TRACE-Omicron: Policy Counterfactuals to Inform Mitigation of COVID-19 Spread in the United States. *Adv. Theory Simul.* 2023, 2300147. https://doi.org/10.1002/adts.202300147 (preprint available at https://arxiv.org/abs/2301.08175)

TEACHING EXPERIENCE

Assistant in Instruction

Fall 2021, Fall 2022	SWDT 6910: Introduction to Agent Based Modeling Instructor: Ross A. Hammond
Fall 2018	ESE 520: Probability and Stochastic Processes Instructor: Vladimir Kurenok
Summer 2018	ESE 105: Introduction to Electrical and Systems Engineering Instructors: ShiNung Ching and Matthew Lew

TECHNICAL SKILLS

- Proficient: Python, R, NetLogo, MATLAB
- Experienced: LaTeX, SQL, SAS, VBA, Java

PERSONAL

Cross Country, Track and Field, and Marathon Amateur Athlete

- 28th Place at 2021 Chicago Marathon in 2:24:35
- Three-time NCAA Division III All-American Cross Country and Track and Field