JADE XIAO

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EDUCATION

Georgia Institute of Technology | Atlanta, GA — Aug 2019 – Aug 2023
PhD in Operations Research

Georgia Institute of Technology | Atlanta, GA — Aug 2019 – May 2022
MS in Operations Research

University of Auckland | Auckland, NZ — Mar 2015 – Nov 2018
BE(Hons) in Engineering Science

National University of Singapore | Singapore — Aug – Dec 2017
Non-Graduating Exchange Program

KEY SKILLS

HEOR	Simulation modeling | Cost-effectiveness analysis | Claims data analysis | Systematic literature review
Coding	R | C++ | Python | Julia | MATLAB
Languages	English (native) | Cantonese (conversational) | Mandarin (conversational)

EXPERIENCE

Value Analytics Labs | Atlanta, GA — Oct 2023 – Present
Data Scientist
- Simulation modeling of medical innovations for health technology assessment

Georgia Institute of Technology | Atlanta, GA — Aug 2019 – Aug 2023
Graduate Research Assistant, H. Milton Stewart School of Industrial and Systems Engineering
- Lead modeler of the COVID-19 Policy Simulator, featured on Fox News, The Rachel Maddow Show, and more
- Conducted cost-effectiveness analysis of non-invasive screening strategies for detecting MASLD in high-risk patient populations
- Developed a method for generating first-degree relative networks exhibiting familial aggregation of disease

Massachusetts General Hospital | Boston, MA — May 2022 – Aug 2023
Graduate Research Assistant, Institute for Technology Assessment
- Developed a microsimulation model of the opioid epidemic to evaluate the impact of the HEALing Communities Study

University of Auckland | Auckland, NZ — Mar 2018 – Jul 2019
Graduate Research Assistant, Department of Engineering Science
- Developed an agent-based model of electric taxi operations in Karlsruhe, comparing plug-in and inductive charging
- Developed text parsers in GATE to identify missing Māori shareholders in newspaper obituaries and the National Pānui

Fisher & Paykel Healthcare | Auckland, NZ — Dec 2017 – Feb 2018
Engineering Research Intern, Surgical Humidification
- Developed a mathematical model of surgical smoke clearance and optical clarity in the pneumoperitoneum during laparoscopic surgery

University of New South Wales | Sydney, AU — Nov 2016 – Feb 2017
Undergraduate Research Assistant, School of Mechanical Engineering
- Constructed realistic benchtop models of patient anatomy suitable for laser flow visualization and cannulation training

AWARDS & HONORS

Professional Awards
- MERLOT Classic Award in Biology, 2022
  - Awarded to the COVID-19 Simulator

University and School Awards
- George Family Foundation Fellowship, 2019
- Senior Scholar Award in the Faculty of Engineering, 2019
  - Awarded to the student with the highest overall grades in the UoA Engineering Science class of 2019
- Cecil M Segedin Prize in Engineering Science, 2019
  - Awarded to the most meritorious final year project of the UoA Engineering Science class of 2019
- Beca Part II Engineering Scholarship, 2016
- Cecil Segedin Undergraduate Scholarship in Engineering Science, 2016
- University of Auckland Dean's Honours List, 2015, 2016, 2018
- University of Auckland First in Course Award for LINGUIST 101, ENGSCI 711, ENGSCI 700
- New Zealand Qualifications Authority Scholarship Award, 2016

Journal articles

- J Chhatwal, J Xiao, AK ElHabr, et al. The impact of multicancer early detection tests on cancer stage shift: A 10-year microsimulation model. *Cancer.* 2025;131(22):e70075. doi.org/10.1002/cncr.70075
- J Xiao, T Ayer, J Chhatwal. Periodic vaccination for post-pandemic management: Insights from and planning beyond COVID-19. IISE Transactions on Healthcare Systems Engineering. 2024;14(4):289–304. doi.org/10.1080/24725579.2024.2340515
- M Haseeb, J Chhatwal, J Xiao, et al. Semaglutide vs Endoscopic Sleeve Gastroplasty for Weight Loss. *JAMA Network Open.* 2024;7(4):e246221. doi.org/10.1001/jamanetworkopen.2024.6221
- J Chhatwal, OO Dalgic, W Chen, et al. Analysis of a Simulation Model to Estimate Long-term Outcomes in Patients with Nonalcoholic Fatty Liver Disease. *JAMA Network Open.* 2022;5(9):e2230426. doi.org/10.1001/jamanetworkopen.2022.30426
- BP Linas, J Xiao, OO Dalgic, et al. Projecting COVID-19 Mortality as States Relax Nonpharmacologic Interventions. *JAMA Health Forum.* 2022;3(4):e220760. doi.org/10.1001/jamahealthforum.2022.0760

Technical reports

- J Chhatwal, Y Xiao, P Mueller, et al. Changing Dynamics of COVID-19 in the US with the Emergence of the Delta Variant: Projections of the COVID-19 Simulator. *medRxiv.* 2020. medrxiv.org/content/10.1101/2021.08.11.21261845v1

Large group authorship articles

- VK Lopez, EY Cramer, R Pagano, et al. Challenges of COVID-19 Case Forecasting in the US, 2020–2021. *PLoS Computational Biology.* 2024;20(5):e1011200. doi.org/10.1371/journal.pcbi.1011200
- EY Cramer, Y Huang, Y Wang, et al. The United States COVID-19 Forecast Hub dataset. *Scientific Data.* 2022;9(1):462. doi.org/10.1038/s41597-022-01517-w
- EY Cramer, EL Ray, VK Lopez, et al. Evaluation of individual and ensemble probabilistic forecasts of COVID-19 mortality in the United States. *Proceedings of the National Academy of Sciences.* 2022;119(15):e2113561119. doi.org/10.1073/pnas.2113561119