Shiv Yücel

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Languages: English, French

EDUCATION

University of Oxford, Department of Geography and the Environment — Oxford, United Kingdom
DPhil, Geography and the Environment — *Oct 2022 – present*

University of Oxford, Oxford Internet Institute — Oxford, United Kingdom
MSc, Social Data Science – Distinction — *Oct 2020 – Aug 2021*

University of Toronto, Trinity College — Toronto, Ontario
Hon.BA, Economics Major, Psychology/Politics Minors CGPA: 3.81/4, Major GPA: 3.87/4 — *Sept 2016 – June 2020*

WORK EXPERIENCE

Project Manager & Data Scientist — Aug 2021 – Sept 2022
Oxford Artificial Intelligence Ltd. — *Oxford, England*
- Managed a team of four data scientists and website developers
- Responsible for projects on air pollution, mobility, and inequality for a large urban charity in London.
- Conducted presentations to stakeholders and domain experts on the findings of our mobility-based indicators, along with relevant details on ethics and methodology.

Data Scientist — Jan 2021 – Aug 2021
Oxford Artificial Intelligence Ltd. — *Oxford, England*
- Analyzed high volume cell-phone mobility and pollution data to study air pollution exposure in the UK
- Developed novel public health tools to support UK government agencies and national charities
- Developed data analysis pipelines as inputs to a live-updating health and inequality monitor

Research Assistant — Sept 2021 – Dec 2021
University of Oxford — *Oxford, England*
- Analyzed largest database of online job advertisements to study the distribution of technological skill demand in the UK

Economics Peer Academic Advisor — Sept 2019 – June 2020
Trinity College, University of Toronto — *Toronto, Ontario*
- Hosted tutoring sessions to help students prepare for economics examinations and written assignments
- Mentored undergraduate students to provide guidance on academic trajectory
- Organized the Trinity College Undergraduate Research Conference

Senior Counselor — June 2017 – August 2017
Camp Arowthon — *Algonquin Park, Ontario*
- Led adolescents on week-long canoe trips in Algonquin Park
- Taught lessons about the important role of provincial parks and greenspace in Canada
- Awarded Counselor of the Year

Communications Coordinator — Sept 2016 – June 2017
Duke of Edinburgh Award, University of Toronto — *Toronto, Ontario*
- Organized community volunteering and leadership-building in the Canadian wilderness
- Helped grow organization from 20 members to over 100

Peer-Reviewed Publications

Access to Opioid Agonist Treatment during COVID-19 Public Transport Disruptions   June 2023
International Journal of Drug Policy (paper linked here)
- Focused on Toronto, a major Canadian city suffering from the opioid epidemic, this paper uses novel routing methodologies to quantify how travel times to individuals' nearest methadone clinics changed due to public transport disruptions from 2019 to 2020
- Used open-source data sources to estimate the vulnerable populations that were impacted by the largest transport disruptions in the city's history.

Impact of Network Centrality and Income on Slowing Infection Spread After Outbreaks   Feb 2023
Applied Network Science (paper linked here)
- Publication based on MSc Thesis with Dr. Chico Camargo, Dr. Rafael Pereira, and Dr. Pedro Peixoto
- Analyzed cell-phone mobility and traffic data to model COVID-19 and assess policy impacts in São Paulo
- Uncovered how demographic factors (eg. race, income) interact with mobility and COVID-19 transmission

Conference Presentations

Adapting to Extreme Heat: Measuring Resilience and Inequalities in Cooling Access   July 2023
New Rhythms of Development, EADI General Conferences   *Lisbon, Portugal*
- Presented research using cell phone mobility data and traditional data sources to explore inequalities in people's abilities to use cooling facilities during heat waves

Impact of Network Centrality and Income on Slowing Infection Spread After Outbreaks   May 2022
13th International Conference on Complex Networks   *Exeter, England*
- Presented methodology to assess the effectiveness of mobility-based lockdown interventions during COVID-19
- São Paulo, Brazil used as case study to assess how mobility restrictions, captured using cell phone mobility data, slow down the spread of disease.
- Captured impacts of travel networks and social inequality as factors influencing the arrival of disease

How Big Data and AI are Tackling Public Health Problems   March 2022
Big Data and AI World   *London, England*
- Demonstrated air pollution exposure tool based on anonymized cell phone mobility and hourly pollution data in London, United Kingdom.

Tomorrow's Legal Teams: Roles, Education, and Training   Sept 2021
Unlocking the Potential of Artificial Intelligence for English Law   *Oxford, England*
- Demonstrated live-updating monitor of technological skill demand in the UK labor market for United Kingdom Research and Innovation policy tool

The Socio-Economic Factors that Influenced Indigenous Nutrition in 1800s   March 2020
Trinity College Undergraduate Research Conference   *Toronto, Canada*
- Presented empirical research on relationship between health outcomes and mobility patterns among nomadic Aboriginals in 19th century.

Non-Refereed Publications

Rapid Evidence Policy Paper on Vaccine Uptake   March 2021
UK Independent Scientific Pandemic Insights Group on Behaviours   *Oxford, England*
- Contributed to emergency policy paper (linked here) on behalf of the UK Independent Scientific Pandemic Insights Group on Behaviours (SPI-B), informing the UK Scientific Advisory Group for Emergencies
- Investigated the relationship between vaccination status and mobility behaviors using cell phone mobility data

Editorial Activity

- Reviewed for PLOS ONE (July 2022) on manuscript analyzing the impact of COVID-19 policy interventions on mobility behaviours

Funding and Awards

- Doctoral Fellowship, Social Sciences and Humanities Research Council of Canada, 2023

- Drew Thompson Scholarship, Trinity College, University of Toronto, 2019

- The Chancellor's Scholarships, Trinity College, University of Toronto, 2018

- Marion P. Osler Scholarship, Trinity College, University of Toronto, 2016

- President's Entrance Scholarship, University of Toronto, 2016

- Dean's List Scholar x 3, University of Toronto

Skills

Python (pandas, numpy, sklearn, geopandas, etc.), R, analytical writing, statistics, mathematics, spatial data science