

# Shiv Yücel

+44-7539-065-406 | shiv.yucel@ouce.ox.ac.uk | Website: shivyucel.github.io

## EDUCATION

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<b>University of Oxford, Department of Geography and the Environment</b> <i>DPhil, Geography and the Environment</i>	Oxford, United Kingdom <i>Oct 2022 – present</i>
<b>University of Oxford, Oxford Internet Institute</b> <i>MSc, Social Data Science – Distinction</i>	Oxford, United Kingdom <i>Oct 2020 – Aug 2021</i>
<b>University of Toronto, Trinity College</b> <i>Hon.BA, Economics Major, Psychology/Politics Minors – CGPA: 3.81/4, Major GPA: 3.87/4</i>	Toronto, Ontario <i>Sept 2016 – June 2020</i>

## WORK EXPERIENCE

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<b>Project Manager &amp; Data Scientist</b> <i>Oxford Artificial Intelligence Ltd.</i>	Aug 2021 – Sept 2022 <i>Oxford, England</i>
<ul style="list-style-type: none"><li>Managed a team of four data scientists and website developers</li><li>I was responsible for projects on air pollution, mobility, and inequality for a large urban charity in London.</li><li>Conducted presentations to stakeholders and domain experts on the findings of our mobility-based indicators, along with relevant details on ethics and methodology.</li></ul>	
<b>Data Scientist</b> <i>Oxford Artificial Intelligence Ltd.</i>	Jan 2021 – Aug 2021 <i>Oxford, England</i>
<ul style="list-style-type: none"><li>Analysis of high volume cell-phone mobility and pollution data to study air pollution exposure in the UK</li><li>Developing novel public health tools to support UK government agencies and national charities</li><li>Developing data analysis pipelines as inputs to a live-updating health and inequality monitor</li></ul>	
<b>Research Assistant</b> <i>University of Oxford</i>	Sept 2021 – Dec 2021 <i>Oxford, England</i>
<ul style="list-style-type: none"><li>Analyzing largest database of online job advertisements to study the distribution of technological skill demand in the UK</li></ul>	
<b>Economics Peer Academic Advisor</b> <i>Trinity College, University of Toronto</i>	Sept 2019 – June 2020 <i>Toronto, Ontario</i>
<ul style="list-style-type: none"><li>Hosted tutoring sessions to help students prepare for economics examinations and written assignments</li><li>Mentoring undergraduate students to provide guidance on academic trajectory</li><li>Organized the Trinity College Undergraduate Research Conference</li></ul>	
<b>Senior Counselor</b> <i>Camp Arowthon</i>	June 2017 – August 2017 <i>Algonquin Park, Ontario</i>
<ul style="list-style-type: none"><li>Leading adolescents on week-long canoe trips in Algonquin Park</li><li>Teaching lessons about the important role of provincial parks and greenspace in Canada</li><li>Awarded Counselor of the Year</li></ul>	
<b>Communications Coordinator</b> <i>Duke of Edinburgh Award, University of Toronto</i>	Sept 2016 – June 2017 <i>Toronto, Ontario</i>
<ul style="list-style-type: none"><li>Organizing community volunteering and leadership-building in the Canadian wilderness</li><li>Helped grow organization from 20 members to over 100</li></ul>	

## PEER-REVIEWED PUBLICATIONS

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**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
- Analyzing cell-phone mobility and traffic data to model COVID-19 and assess policy impacts in São Paulo
- Understand how demographic factors (eg. race, income) interact with mobility and COVID-19 transmission

## FORTHCOMING PEER-REVIEWED PUBLICATIONS

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**Access to Opioid Agonist Treatment during COVID-19 Public Transport Disruptions** Oct 2022  
*Accepted with Minor Revisions to International Journal of Drug Policy* ([preprint 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
- This paper uses open-source data sources to estimate the vulnerable populations that were impacted by the largest transport disruptions in the city's history.

## PEER-REVIEWED CONFERENCE PRESENTATIONS

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**Impact of Network Centrality and Income on Slowing Infection Spread After Outbreaks** May 2022  
*13th International Conference on Complex Networks* Exeter, England

- Presentation of 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.
- Captures impacts of travel networks and social inequality as factors influencing the arrival of disease

## NON-REFEREED PUBLICATIONS

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**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
- Investigating the relationship between vaccination status and mobility behaviors using cell phone mobility data

## NON-REFEREED CONFERENCE PRESENTATIONS

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**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.

## EDITORIAL ACTIVITY

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

## AWARDS & ACHIEVEMENTS

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### **2016-2021**

- Distinction on MSc Course and Thesis, Oxford Internet Institute, University of Oxford
- Dean's List Scholar x 3, University of Toronto | The Drew Thompson Scholarship, University of Toronto
- The Chancellor's Scholarships, University of Toronto | Marion P. Osler Scholarship, University of Toronto
- Trinity College Board of Stewards

## SKILLS

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