Dr Swapnil Mishra

Email: s.mishra@nus.edu.sg Web: https://smishra.dev/

Research Profile

Dr Swapnil Mishra is an Assistant Professor at Saw Swee Hock School of Public Health at NUS. His research is on spatiotemporal statistics and Bayesian machine learning, applied to public policy, global health and social science. Swapnil won the NUS PYP (2024), the NRF Fellowship (2023), Blackwell-Rosenbluth Award (2022), and the SPI-M-O Award for Modelling and Data Support (2022) for modeling advice provided to the UK government during the COVID-19 pandemic. In 2022, he co-founded the Machine Learning & Global Health network (www.MLGH.net) of researchers spanning three continents with a kickoff workshop held in Kigali, Rwanda at ICLR in 2023.

Education, Academic and Teaching

Education

2015 – 2019 PhD **Australian National University** – Computational Social Science, Research School of Computer Science
Thesis title: Linking Models for Collective Attention in Social Media.

2012 – 2014 MSc **Australian National University** – Machine Learning, Research School of Computer Science
Thesis title: Implementation and Experiments with Novel Parallel and Bursty Non-parametric Topic Models

2005 – 2009 BEng **University of Pune** - Computer Engineering, Department of Computer Engineering

Academic Positions

2023 - Present **National University of Singapore – Assistant Professor**
2023 - Present **IDRTO, National Centre for Infectious Diseases – Visiting Investigator**
2021 - 2022 **University of Copenhagen – Assistant Professor in Machine Learning and Public Health**
2019 - 2021 **Imperial College London – Postdoctoral researcher in Geostatistics**
2015 - 2019 **Australian National University – Research Assistant:** Computational Media Lab
2014 - 2015 **Data61 (CSIRO) – Research Assistant:** *Optimisation research Group*
2012 - 2014 **Australian National University/Data61(NICTA) – Research Assistant:** *Machine learning research Group*

Scholarships, prizes and awards

2024 **Presidential Young Professorship (Class of 2024)**
2023 **Singapore NRF Fellowship (Class of 2023)**
2022 **Blackwell-Rosenbluth Award**
2022 **SPI-M-O Award for Modelling and Data Support**
2021 **The Queen's Anniversary Prize 2021 – Imperial College COVID-19 Response Team, United Kingdom.**
2018 **ICWSM Travel Grant**
2018 **ANU Vice Chancellor Travel Grant**
2016 **CIKM Travel Grant**
2015 **Australia International Student PhD scholarship**

Grants

2023 **NRF-NRFF15-2023-0010(SGD 3.1 million) (PI)**
2023 **Start-up Grant, NUS (SGD 250,000) (PI)**
2022 **Digital Technology Development Award, Wellcome Trust (USD 612,665) (Co-PI)**
2020 **Imperial COVID-19 Response Fund (£46,975) (Co-PI)**
2020 **Microsoft AI for Health program ($130,000) (Co-PI)**
2020 **Amazon AWS Compute Grant ($45,000) (Co-PI)**

Consulting

2020 **New York State:** Advisory group for COVID-19 response
2020 **Herbert Smith Freehils:** Advisory group for COVID-19 response

Selected Invited/Keynote speaker Presentations

2023 Statistical Methods Talk, Duke-NUS
2022 Seminar on Advances in Probabilistic Machine Learning, Helsinki
2022 Invited Talk: Pandemic forecasting: Lessons learned from COVID-19, IISA, Bengaluru
2022 VinFuture Innova Talk, Hanoi, Vietnam
2020 Keynote lecture: Scalable Mechanistic Bayesian Models for COVID-19 Transmissions, Stan-Con 2020
2020 Invited lecture: Estimating the number of infections and the impact of non-pharmaceutical interventions on COVID-19, European Consortium of Mathematics in Industry
2020 Invited lecture: Estimating the number of infections and R(t) for COVID-19 with a Semi-mechanistic Hierarchical Bayesian Model, DeepMind
2019 Invited lecture: VAE to learn functions, RSS 2019, Belfast

Publication Summary

Google Scholar
https://scholar.google.co.uk/citations?user=RqbpaXcAAAAJ&hl=en