

Research

Introduction

Welcome to My Professional Page

Welcome to the official webpage of Dr. Zia Farooq, a researcher and data scientist specializing in epidemiology and public health. With a PhD in Epidemiology and Public Health, my work is driven by a deep commitment to advancing scientific knowledge to better understand and predict the risk of infectious disease outbreaks. My research employs cutting-edge data science techniques, spatiotemporal modeling, and the exploration of diverse risk factors to uncover critical insights into disease dynamics.

Research profile

My research projects span various aspects of epidemiology and public health, with a particular emphasis on predicting and understanding infectious disease outbreaks using the computational tools such as data science and modelling.

PhD Research: Focused on spatiotemporal modeling of disease patterns, identifying the role of environmental and socioeconomic factors in disease outbreaks. My PhD thesis titled: *Navigating epidemics by leveraging data science and data-driven modelling* encompasses a variety of predictive modelling studies infectious diseases such as COVID-19, Dengue, and West Nile virus (WNV).

[PhD Thesis](#)

Postdoctoral Research: Exploring the impact of climate change on vector-borne diseases, developing predictive models for public health planning.

Post-doc

Data Science Initiatives

Beyond my core research and being a data passionate, I engage in personal data science projects that allow me to explore innovative approaches to public health challenges. These projects include:

Predictive Analytics: Developing machine learning models to forecast health trends.

Data Visualization: Creating intuitive and impactful visualizations to communicate complex epidemiological data is very crucial to contribute to not only to the epidemiological research but also to the public health policy making. Impactful graphs such as spatio-temporal disease trends and risk maps

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