ANTHONY KIMPTON

Response to Selection Criteria

ESSENTIAL

1. Previous work experience in a data or statistical role

I have 7 years of experience as a researcher at the University of Queensland (UQ) researcher, 1 as a software developer for the Australian Urban Research Infrastructure Network (AURIN), and my current fixed-term appointment at UQ is to use TRAVELLER—an ABS MADIP module—to investigate Australian international and internal migration. While I have experience with Stata, Excel, ArcGIS, Python, SQL, Docker, Bash, and have taught the first three, my R capabilities are what will set me apart as a candidate for the data analyst role. I require only R for all my data harvesting, harmonisation, visualisation, geospatial analyses, and statistical modelling. Further, I employ R to generate a range of outputs including reports, presentations, interactive dashboards, and web applications including Applications Programming Interfaces (APIs) employed by AURIN for their transport accessibility, synthetic population, transport simulation microservices, and data visualisation applications that I developed for the Australian Transport Research Cloud (ATRC). Lastly, I containerise my R environment using Docker to ensure that my applications and statistical analyses are transparent, sustainable, scalable, and reproducible on any operating system or server, which is a research standard held in high regard by the Australian public, international research community, and organisations including the ABS.

2. Strong analytical and conceptual skills, including the ability to problem solve and make decisions based on analytical evidence

I have 15 peer-reviewed publications (https://scholar.google.com/citations?user=rq0D3PMAAAAJ&hl=en) and 3 further currently under peer-review. My publications focus on expanding and refining conceptual models, adapting statistical methods from adjacent fields, and translating research findings into policy recommendations. For example, my “A spatial analytic approach for classifying greenspace and comparing greenspace social equity” contrasts local council greenspace minimum standards and researcher social equity operationalisations for developing a social equity conceptual model that is now used by other researchers and especially in the United Kingdom. I also employ ABS census data to identify the social groups with consistent greenspace social inequities, demonstrate that the social groups identified varies according to how social is operationalised, and provide recommendations for land use policy to ensure that all social groups have comparable opportunity to use public greenspace.

The largest and most outstanding demonstration of my capabilities to date is my thesis entitled “*The Sociability of Urban Greenspace: An Exploration of How Public Parks and Private Backyards Influence the Social Sustainability of Urban Communities*” and I was awarded a *UQ Dean’s Award for Outstanding Thesis* in 2020 for which fewer than 10 percent of UQ PhD are eligible.

3. Experience working in and contributing to a high performing team

My 7 years of research experience was funded by prestigious Australian Research Council (ARC) Discovery and Linkage projects, my 1 year as a software developer by the National Collaborative Research Infrastructure Strategy (NCRIS), and I am currently funded by an ARC Discovery project once more and so I have exceptional experience collaborating within high performing teams. My role has also included systematic literature and policy reviews but given my relatively unique experience and capabilities, my role is more often defining and clarifying operationalisations of key concepts; cleaning and harmonising tabular and spatial data; building databases; processing big data; spatio-temporal and multilevel modelling; and developing microservices, websites, and web applications. For instance, I have developed an interactive project dashboard for the Queensland Department of Transport and Main Roads (https://parks-uq.github.io/) and a containerised Journey to Work web application for AURIN’s Australian Transport Research Cloud (https://aurin.org.au/about-aurin/network/atrc/).

4. Good oral, written and presentation communication skills

I have eight years of teaching tertiary experience that includes teaching statistics with Stata, Excel, ArcGIS, and ABS resources including Datapacks and Community Profiles. Further, I have presented at criminological and geographical conferences overseas on five separate occasions, was paid presenter at local Secondary Schools and Teacher events on multiple occasions to promote the geography and demography programs at UQ. Lastly, I have run a public forum attended by over 200 local residents, traders, and representatives of local and state government; co-authored 3 articles for The Conversation that have attracted over 55,000 readers and 269

CONTACT INFO

a.kimpton@uq.edu.au

https://github.com/akimpt

+61 412 452 471

For more information, please contact me via email.

comments (https://theconversation.com/au/search?q=anthony+kimpton); been interviewed to discuss my research on television twice and to professional organisations, national campaigners, and elected officials on multiple occasions.

5. Proven ability to work flexibly in a changing environment

My formal undergraduate training in quantitative sociology has provided strong conceptual and statistical foundations, which has enabled continual employment within a range of research disciplines including criminology, sociology, geography, urban planning, and civil engineering. While I lack formal training in software development, I have also successfully learnt to containerisation and microservice software develop on the job, which highlights my established reputation as adaptive and a quick study. My approach to rapid and self-directed learning is that I translate relevant data science and analytical techniques into the R programming language since coding demands a clear and concise understanding of the technique, and this challenge also ensures that I continually expand and refine a cutting-edge toolkit of R scripts and source code within a private GitHub repository.

DESIRABLE

6. Experience supervising staff and supporting staff development

I have 5 years of experience training and supervising tutors for a class of over 150 first year students, and am currently the lead investigator and project manager for the development of the Green Australian Vehicle Ownership (GreenAVO) service that harvests and combines state vehicle registrations with the Green Vehicle Guide API to capture, monitor, map, and model Australian transport poverty and the national transition towards electric vehicles (https://aurin.org.au/about-aurin/network/aurin-high-impact-projects/). In addition, I am a PhD supervisor for a civil engineer and a demographer that uses the ABS' MADIP service, and a statistics and programming mentor to a large number of PhDs since I value collegiality and opportunities to clarify, refine, and deepen my understanding of complex topics through discussion and demonstration.

7. Academic qualifications in statistics, data science, mathematics, econometrics, economics, accounting, finance, psychology/social sciences, demography and other fields with a strong quantitative component.

I have an undergraduate and honours degree in quantitative sociology, a PhD in human geography, and my peer-reviewed urban planning, human geography, and criminology publications and citation rate places me in the above the global 95th percentile in a range of fields including green infrastructure, cultural ecosystems, crime prevention, travel behaviour and modal choice, and disciplines including geography and public health.