<u>J-PAL Africa</u> in the Southern Africa Labour and Development Research Unit School of Economics, Faculty of Commerce is seeking a Data Scientist to support its Water, Air, and Energy (WAE) Lab, a collaboration with the City of Cape Town (CCT).

The WAE Lab works to co-generate research and inform the scaling of evidence-based programs and policies that effectively improve access to clean air, water, and reliable energy for all residents of Cape Town. The selected candidate will be seconded to the Data Science team at the CoCT and play a key role in developing data infrastructure, facilitating data-driven policymaking, and supporting research projects.

**About J-PAL:** The Abdul Latif Jameel Poverty Action Lab (J-PAL) consists of a global network of academics specializing in conducting rigorous evaluations of social policies to generate scientific evidence. This role provides an excellent opportunity to work at the intersection of research, policy, and data science to contribute to impactful policymaking. We seek to appoint a full-time T1 (12 months contract).

#### Requirements for the position:

- A relevant tertiary qualification (Honours NQF 8) in Computer Science, Engineering, Statistics, Applied Mathematics, Economics, Information Technology, or a related field.
- At least two years of relevant experience working with large and complex datasets, including data extraction from multiple systems.
- Proficiency in programming languages such as Python /R, and SQL.
- Demonstrable experience with data modeling, data warehousing, and cloud computing.
- Experience with data visualization tools and dashboarding (Tableau, Power BI, etc.).
- Familiarity with data security and governance best practices.
- Excellent communication and problem-solving skills.
- · Ability to work collaboratively with government, research, and technical stakeholders.

#### The following will be advantageous:

- A Master's degree is preferred.
- Experience working with public sector data systems.
- Knowledge of machine learning techniques and their applications in public policy.
- Familiarity with version control systems (GIT) and DevOps practices.
- $\bullet \quad \hbox{Experience with survey programming or administrative data linking}.$
- Ability and willingness to work from the Cape Town Civic Centre as project needs dictate.

# Responsibilities include:

### **Developing and Implementing Data Infrastructure**

- Design, develop, and maintain data infrastructures, pipelines, platforms, and products.
- Assist in conducting data analytics and synthesis for policy-relevant insights.
- Create repeatable and reusable data products.
- Implement data integration solutions and ensure continuous data availability.
- Establish data modeling standards and maintain metadata repositories.
- Support the automation and optimization of data flows within CCT.

#### **Data Innovation**

- Monitor and implement emerging trends in data engineering and analytics.
- Introduce new data techniques and platforms within the CCT to enhance decision-making.

## **Data Problem Resolution**

- Troubleshoot and resolve data processing issues within infrastructure.
- Identify and implement solutions for improving data quality and system performance.

#### **Project Collaboration**

- Work with CCT officials, researchers, and technologists to co-develop scalable data solutions.
- Support J-PAL Africa's research team in accessing and utilizing administrative data.

## **Stakeholder Relationship Management**

- Develop and maintain relationships with CCT departments, J-PAL Africa, academia, and other key stakeholders.
  - Ensure alignment of data infrastructure with policymaker needs and research objectives.

The annual cost of employment is between R784,833 and R923,330 depending on qualifications and experience.

#### **Employment Details & Application Process:**

To apply, please complete this short <u>application form</u>. As part of the application, you will be required to attach a single PDF file containing the following documents to <u>amv@povertyactionlab.org</u>

- UCT Application Form HR201 (download here)
- A letter of motivation outlining your qualifications for the role
- Curriculum Vitae (maximum 3 pages)
- University transcripts

An application which does not comply with the above requirements will be regarded as incomplete. Applications will be reviewed on a rolling basis and we encourage you to apply early. Only shortlisted candidates will be contacted and will likely be required to undergo an assessment process before interview rounds.

As the cost of employment is being paid for from externally derived funds, this appointment is subject to the availability of funding. Recruitment will follow UCT's hiring procedure and remuneration is commensurate with UCT pay-scales.

Closing Date: 11 August 2025

Website: www.povertyactionlab.org

Reference: E25810

UCT is a designated employer and is committed to the pursuit of excellence, diversity, and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at https://uct.ac.za/media/9482.

When you apply for a position at UCT, we collect your personal information to assess your application, communicate with you, and coordinate interview logistics. Information such as race, gender, nationality, and disability status is used to support our Employment Equity obligations. We also verify your references, qualifications, conduct criminal and, for certain roles, credit checks. For more information about how the University of Cape Town uses personal information and your rights, please email <a href="mailto:popia@uct.ac.za">popia@uct.ac.za</a>.

The University reserves the right to extend the closing date for applications if deemed necessary and reserves the right to make no appointment.