



Internship Opportunity in Johannesburg

IBM Research is one of the world's largest and most influential corporate research labs, with an unmatched investment in research and core science, and a commitment to invent the future of technology by making scientific breakthroughs that will transform industry and society. We innovate and imagine the future and have a strong commitment to develop the next generation of top research talent. We host many scientists, visiting academics and students in the belief that it takes broad collaboration between the brightest minds to create innovations that make the world work better.

With the IBM Research Africa internship initiative, we are reaching out to outstanding young research talent in South Africa and invite qualified masters and doctoral students to apply for a 12-month internship position at the IBM Research lab in South Africa and take up this opportunity to work at a world-class research lab on some of the grand challenges and pressing problems that we are facing today. Candidates will gain insights into real industry challenges and obtain hands-on experience that should be valuable to their university and faculty. Candidates will bring back knowledge of IBM's advanced technologies and contacts throughout IBM Research.

The ideal candidates should have an applied knowledge in some of the following fields: data science, cloud computing, artificial intelligence, Internet of things, computer vision, software engineering, applied physics and statistics. Successful candidates will develop and deploy proof of concept technologies and algorithms for the projects they are assigned to. The candidate will be expected to demonstrate the ability to define research questions, formulate hypothesis, and develop and demonstrate innovative solutions using cutting edge technologies. Furthermore, the candidate will be expected to collaborate extensively with internal and external teams.

Research projects will mostly be characterized by data driven innovation and machine learning, example research projects include: unsupervised machine learning on the cloud, traffic optimization, TB contact tracing, pulsar detection, genomics, computational biology, natural language processing applications in medicine, image analysis, air quality management, and stream processing analytics for the Square Kilometer Array radio astronomy project. Many of the research projects will be geared towards having transformational impact in South Africa and across the African continent.

The internship is open to any recognized MSc, MEng or PhD candidate working in the following areas at the time of application: Computational Biology; Computer Science; Data Science; Electrical, Electronic or Computer Engineering; Genomics; Industrial Engineering; Physics; Service Science; Statistics.

Requirements

Candidates applying for this position should fulfill the following requirements:

- Be a South African Citizen.
- Member of designated groups as defined in the Employment Equity Act.
- Registered at a recognised university in one of the aforementioned fields of study.
- Considerable programming experience in prominent languages such as C++, Python, Java, JavaScript, MATLAB, and R.
- Demonstrable academic research proficiency based on the scientific method.
- Working knowledge of popular and current machine learning methods and implementation techniques.
- Experience in application programming notably for mobile and web-based applications, development of web APIs, and user experience design for a variety of platforms.
- The candidate should be comfortable applying their knowledge and expertise in different domains and partnering with domain experts.

Experience with deep learning, signal and image processing, and computational mathematics will be advantageous.

IBM is an equal opportunity employer and encourages applications from both genders as well as minority groups. Students must have a solid command of both written and spoken English.

How to Apply

Interested candidates, please submit your current CV to Sibongile Mkwanazi via email (Mkwanazi@za.ibm.com).

The IBM selection committee will review the nominations/applications from lecturers and professors, from which they will select the best candidates at their discretion.

Thank you very much for supporting this initiative and we look forward to receiving your applications. In doing so, you are giving your brightest students an opportunity that could significantly boost their future career prospects.