



Type: Technology Development

Role: Data Scientist

Venture: [Busara Center for Behavioral Economics](#)

Location: Nairobi, Kenya

Deadline: July 7, 2019

About Busara

Busara is a research and advisory firm dedicated to advancing and applying behavioral science in the emerging markets. Busara applies rigorous research methods and evaluation tools to enable partners to improve program design, assess existing interventions, and optimize internal processes. We work with governments, NGOs, private companies and academics to understand human behavior, and design solutions to overcome behavioral barriers to products, programs and policies as they scale. Busara operates from its permanent offices in Kenya, Nigeria, Ethiopia, Uganda and Tanzania, and has worked on projects with with partners across the continent. We currently have 69 active projects, 112 completed projects, 36 academic affiliations, 3 operational decision labs, and 145 full time staff.

Busara is a non-profit organization founded in 2012 by Professor Johannes Haushofer (Princeton University) and operating under the leadership of Dr. Jeremy Shapiro. We have worked on projects related to agriculture, financial inclusion, savings, inequality, entrepreneurship, civic engagement, and other questions central to development economics.

In partnership with Busara, as a Fellow with Engineers Without Borders Canada (EWB Canada), you will be placed as a Data Specialist with Busara to work with their team in Kenya. Throughout your Fellowship with EWB, you will receive guidance, mentorship and financial support from the community in Canada and in East and West Africa.

About Engineers Without Borders Canada (EWB)

EWB is a free-thinking charitable organization that brings people and ideas together to tackle the most crucial causes of poverty and inequality. We nurture talent and leadership, enable social entrepreneurship and advocate for policy innovations to cross-breed systems-changing innovations to ensure economic and public opportunity reaches everyone, including the most underserved and marginalized populations, especially women and girls.



Through our leadership curriculum and Fellowships Program, we offer experiential learning opportunities in Canada and sub-Saharan Africa to launch future shapers equipped to understand and re-engineer complex social systems. For more information, [visit ewb.ca](http://visit.ewb.ca).

About You

Data Specialists / Scientists support the research and advisory arms of Busara by providing capacity for data management, quality and data analytics. Data Specialists / Scientists creates, explores, evaluates and improves data from Busara projects, products and internal systems. Data Specialists and Data Scientists collaborate with a multidisciplinary team of developers, Associates and Analysts on a wide range of data problems. This position brings analytical rigor and statistical methods to the challenges of measuring results from randomized controlled trials, estimating adequate power for robust experimental designs, using statistics to answer questions regarding human behavior and resulting consequences. Data Specialists / Scientists are intimately familiar with survey datasets produced by Open Data Kit (ODK) and Survey CTO, experimental datasets produced by zTree and oTree, large administrative data from technology and financial companies, open-source datasets, and geospatial datasets.

Responsibilities

As a Data Specialist for Busara, your responsibilities will include:

- Manages the data generation and management process on Busara projects, products, and internal initiatives;
- Works with Associates on projects to optimize data processes and quality from field, lab and advisory projects, including flagging out inconsistencies and/or errors arising from data obtained from the field as part of routine data checks;
- Conducts Data Cleaning and preparation for analysis, including well labelled and appropriately shaped data;
- Creates high frequency checks, error checking, and documentation for best practices;

- Provides sophisticated statistical analysis on experimental and non-experimental datasets for causal inference;
- Creates machine learning algorithms for predictive analysis;
- Provides power simulations and power calculations for experimental designs with multiple hypotheses, covariates and clustering;
- Presents data from analysis using appropriate tables and visualizations;
- Collaborates with project teams (mainly associates and analysts) throughout the project lifecycle, ensuring that tools are designed in a way that study objective can be realized and that necessary hypotheses can be tested;
- Collaborates and works closely with the programming team to integrate statistical analysis.

Data Scientists tasks include, in addition to the above tasks:

- Ability to source data from websites, databases, or other sources;
- Programs scrapers, converters and bots to query and create new data;
- Works with the programming team to optimize data for analysis;
- Explores big data sets of different sizes and shapes and extract meaningful insights from the data without specific ex-ante hypotheses.

Sound exciting? Here's who we are looking for.

Skills & Qualifications

- University degree in mathematics, computer science, or statistics;
- 1-3 years working experience in an analytics or research capacity;
- Extensive experience with and command of Stata, R, or Python;
- Familiarity with interacting with SQL databases;
- Extensive experience with survey design;
- Extensive experience with data modelling;
- Ability to manage a team;
- Excellent management and organizational skills, strong communication skills;
- Flexible, self-motivating, able to manage multiple tasks efficiently and a team player;
- Demonstrated experience with statistical analysis in both academic and professional settings;
- Interest and experience working in a fast-paced working environment;
- Fluency and excellent communication and writing skills with a mastery of English.

Data Scientists tasks include, in addition to the above tasks:

- Masters in applied quantitative science, preferably social science;



- Experience analyzing data from experiments including Randomized Control Trials;
- Advanced data analytics and data modelling skills;
- Strong command of data visualization techniques in Stata, R or Python;
- Applied experience with machine learning;
- Familiarity with behavioral science.

Application Inquiries

- For inquiries about the EWB Fellowship experience, please contact: fellowrecruitment@ewb.ca
- For inquiries about the role with Busara, please contact: [Rebecca Amo](#)

Application Instructions

For further details on how to apply, please refer to [our website](#).