



EWB Long Term Fellowship Data Scientist - Viamo

Role: Data Scientist Venture: Viamo

Website: http://viamo.io

Location: Accra, Ghana or Kampala, Uganda

Start Date: Training beginning May 7th 2018, departure for placement May 27th **Duration:** 3 weeks of training in Toronto, 12 months in Ghana or Uganda

About Engineers Without Borders Canada (EWB)

Engineers Without Borders Canada (EWB) is a Canadian NGO that invests in people and ventures to create a thriving and sustainable world. Bolstered by its network of 40 chapters and 1300 members, EWB provides seed funding, talent and mentorship to social enterprises throughout Sub-Saharan Africa. For more information on EWB, visit http://ewb.ca.

About the EWB Fellows Program

The EWB Fellows Program exists to develop a cadre of Systems Change Leaders by equipping them with the opportunities, competencies and skills needed to build a more thriving and sustainable world. Every year we recruit 25-30 outstanding people for the 12-month Fellowship, placing successful candidates in one of our early-stage Ventures located throughout Sub Saharan Africa. This Fellowship opportunity is with Viamo and is based in Accra, Ghana or Kampala, Uganda.

About Viamo

Viamo (formerly know as VOTO Mobile) is a fast growing social enterprise with over 15 offices around the world including hub offices in Accra and Kampala. Our services help partners distribute and collect information by engaging difficult-to-reach populations through their mobile phones. We specialize in interactive voice calls (including IVR) and SMS in local languages, instantly reaching across distance and literacy barriers. We serve a wide variety of use-cases including under the broad themes of Data Collection and Behaviour Change Communication: journalists who run national public interest surveys, rural clinics who distribute maternal health education, policy makers who study vaccine supply chains, economic development organizations who reach out to farmers, urban planners who monitor water distribution access, and academics who research the effect of public health interventions. We also have an API





used to power existing mobile service providers.

About the Role

Viamo has over 1 million monthly users who engage with our services. We need to constantly improve their experience and increase engagement rates and social outcomes of those engagements. We think about how to drive repeat usage, why some users instantly know how to use our system and others need to be taught, what impact the accent, gender and language of our voice has on engagement rates and much more. In short we have business problems centered around improving our user experience and we have hypotheses on the answers.

Like any web company we log every action our users take and every piece of content they engage with, including regular use of A/B tests. This gives us a giant database to query as we try to answer our business questions.

Our missing link is the ability to extract insights from our data that will help answer key business questions. We'd like a Data Scientists to support our business and product teams to improve our services based on our existing data. An advanced candidate could apply machine learning techniques to capture some interesting opportunities we see.

You'll be the first person in this role so consider it a trial by fire experience. That said we have software developers who can provide some guidance, business owners familiar with the process of gleaning insights from data and finally some folks with stats skills. Also, your internal clients will be highly engaged.

As a Data Scientist for Viamo, your responsibilities will include:

- Be the organizational thought leader on how to create value from our data (i.e., both what is possible and how to do it) and make proposals for new business opportunities or tech/data investments
- Improve our data structure/organization to ensure we have the foundational information needed to answer key business questions (wrangle our data)
- Analyze user data to generate cross-project insights that answer business problems, especially those centered around improving the user experience and user outcomes
- Provide input to Product Owners and Project Managers on useful tests to run in future projects
- Act as an escalation point for challenging analysis needed on individual projects (e.g., use raking to weight survey data)
- Create reports and visualizations to present findings to internal and external clients
- Train Project Managers in data analysis, and possibly develop guidelines/tools/checklists





for them to follow

 An advanced candidate will be able to apply machine learning techniques to some of our core products like the 3-2-1 service (e.g., build a content recommendation engine, match users to appropriate sponsored/advertised content)

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

Skills & Qualifications

- **Education:** Degree in Math, Economics, Business, statistics, Computer Science or related field (Master's degree preferred)
 - o At least 2 years of relevant professional experience including quantitative analysis responsibilities
- Analytical skills: You can turn large amounts of data into insights
 - o Experience pulling data using SQL
 - o Experience with at least one statistical software program (e.g. R, SPSS, SAS, Python). You will be able to do some analysis in Excel but real success will require more advanced tools.
 - o Experience evolving the structure of data, we anticipate many questions will come up where we don't have the data setup in a way to answer them.
- **Problem solving skills:** You can develop an approach to answer a tough question, implement the analysis and then synthesize the results to find the "so what".
- **Communication:** You can listen to understand the real business problems and then communicate back out your recommendations and insights in an understandable way. Includes verbal, written and visual/graphical communication.
- Creative and entrepreneurial attitude: You'll be a pioneer for us as the first to do advanced data analysis. We want you to help us find new ways to gain value from our data. If you're less experienced we want you to be able to learn new skills quickly as opportunities demand.
- Interest in Mobile for Development: you're interested in tech products aimed at helping low income folks in Africa and Asia improve their lives.

<u>Please note</u>: You must be a Canadian citizen, permanent resident, or landed immigrant in order to apply. No exceptions.

Compensation

All costs relating to the placement are either paid for directly by EWB (airfare, insurance, vaccinations, trainings) or indirectly through a living stipend, which covers food, living expenses,





local travel, etc. Fellows also receive an honorarium that can be used to assist with repatriation costs that is provided after completion of 12 month contract. The stipend covers basic living expenses for a modest lifestyle in your placement country. It is not likely that you will be able to use the stipend to cover previous expenses (ex. student loans). However, EWB will do its best to support you in extending the non-repayment period on student loans if necessary.

Additionally, EWB offers a range of benefits including insurance, a settlement allowance, professional development opportunities, and more.

Application Instructions

Submitting your application for the EWB Fellowship involves two steps:

Step 1: Under the subject line "Data Scientist - Viamo", submit your CV/Resume to ltfrecruitment@ewb.ca.

Step 2: Complete the following online application form.

We **highly encourage** applicants to apply for more than one role as this is a highly competitive program. If you would like to submit your candidacy to more than one role, <u>please fill out separate forms</u>.

Applications will be reviewed, and interviews scheduled on a rolling basis, so please submit your application as soon as possible. If the posting is still on our website, consider the role available.

For further detail about EWB, please refer to our website.