



Vacancy Role: Technical Manager

SEMA is seeking a full-time pro-active, high-energy, and creative professional to assist on hardware and software technical development for a civic tech startup in Kampala. SEMA provides tools to gather user feedback to improve Ugandan public institutions.

Do you have a passion for technology? Finding out what's wrong with a piece of hardware and tinkering until it's fixed, diving into the firmware, or tweaking the code of a website? Thinking about how to produce technology that works as well as possible for the people who need it? Dreaming about how to make the best possible hardware with the production techniques available in East Africa? Then you might be the ideal candidate for our new Technical Manager.

About SEMA

SEMA, a Swahili word meaning "Speak!, what's up?", is a social enterprise based in Uganda and The Netherlands. We aim to increase transparency and accountability of public services by gathering real-time citizen feedback. We collect data through three methods: 1) push-button "smiley face" feedback devices; 2) face-to-face interviews; 3) at-distance interviews using technology such as USSD, IVR, phone surveys, and chatbots.

Your responsibilities:

The key responsibilities of the position are maintaining and improving the 1st and 3rd feedback methods listed above: hardware and software tools SEMA uses to collect feedback data. We are specifically looking for a do-a-bit-of-everything engineer that has an entrepreneurial, creative spirit who will go beyond just "Mrs/Mr. Fix-It," and become someone who drives how our company evolves its technologies. This means we need a self-motivated, independent and responsible hustler who knows a good bit across hardware, firmware, web and software, but isn't afraid to jump in and learn something new.



You will primarily:

- Take the lead in the maintenance and uptime of SEMA's hardware devices. When one device stops working, that means you're on a boda to go find out why and get it back up, or assigning this task to a technical assistant. Reduce downtime to as close to 0% as possible.
- Lead the hardware development process for SEMA's hardware devices in Uganda:
 - assembling devices, which requires only basic soldering skills. Testing these devices against the data dashboard.
 - working with our local suppliers to produce elements of SEMA's device and ensuring the quality and delivery of that work;
 - develop how our devices are implemented at the offices of clients, including optimizing for instance room placement, device design, visibility, and hardware elements that can boost the usage of these devices;
 - installing and conducting training sessions on these devices to instruct our clients (and internal team) on their proper use.
- Assist in the maintenance of the firmware of SEMA's hardware devices. Using Arduino, some edits to existing code will be needed. If you're familiar or want to learn more, your work can include tweaking the code for better efficiency (i.e. power consumption on battery).
- Take the lead in software processes:
 - SEMA uses a data dashboard based on a MongoDB database and javascript (react) front-end. Engineers familiar with this code can work on tweaking the front- and/or back-end to improve the database.
 - the development of natural language processing tools which help us quickly analyze citizens' qualitative feedback into automatically generated insights.
- Be the general "techie" around the SEMA office and be an advocate for technology within our Ugandan team.

What we are looking for:

- Completed training in software engineering, product development, hardware such as electrical/mechanical/plastics engineering, computer science, or a similar field



- 3+ years experience working in hardware, software, or product development
- Experience with hardware assembly and firmware coding especially Arduino;
- High level of independence - when you're given a task, we expect you can get it done with minimal oversight
- High level of responsibility - when you're given a task, we know it's going to get done
- High level of excellence - when you're given a task, we know it's going to get done to the highest quality possible
- Someone with creativity in design - don't just accept what's there, dream and think about how to make it better and openly share this information.
- A user-focused and business-focused mind: developing technology is great, but does it work for the user? Does it provide value for the client?
- Interest in/driven by social impact and seeing the result of your work improve local communities, rather than profit
- A strong interest and/or experience in working with a start-up is an asset.
- Excellent English speaking and writing skills; Luganda and other languages are strong assets.
- Proven experience and interest in managing junior-level employees is a strong asset.

We offer you:

- A full-time position with competitive remuneration commensurate with experience and skill set, based on an employee agreement with our locally registered entity in Uganda
- The chance to turn this position into a major part of our team i.e. a management role creating a team you will manage, given a strong track record of success over a long enough period of time (and the budget)
- Reasonably flexible schedules, although this is a full-time position. We embrace distance working especially around COVID concerns.
- The chance to be part of a transparency movement that changes government performance in East Africa.
- International exposure as part of a young international social enterprise with a global board of Directors in The Netherlands.
- A career path towards increasing experience as SEMA grows, based on successful results.



- Exposure and connections to some of the best minds in civic tech, justice innovation and public service development.
- A fun, fast-paced environment with a supportive dynamic team.
- Place to work in a cool startup hub in Kampala.

How to apply:

- **Only applications with the following materials will be selected:**
 - An e-mail to info@talktosema.org containing:
 - **The subject line “Application: Tech Manager”**
 - **Attached, a 2-page CV (please limit your CV to 2 pages only)**
 - **Attached, a 1-page motivation letter**
 - **Two professional references we can contact**
 - *Keep in mind, we look for high quality work and technical ability in those who apply. So sending a badly formatted e-mail, CV, letter, or disregarding these specifications does not reflect well on your application.*
- **Apply by 1st September 2020.**