

Mee Panyar **Volunteer Mobile Developer**

SUMMARY

Are you a student with Android development experience? Do you want to help bring reliable renewable electricity to the millions of people in Myanmar who do not have access to the national grid? Mee Panyar is a Myanmar-based social enterprise that empowers communities to meet their own energy needs with solar microgrids and is looking for a volunteer to take its mobile app for rural electricians to the next level. Volunteers will have the unique opportunity to visit Myanmar (once travel restrictions lift) and see project sites where the app is being used. To get involved, please reach out to info@meepanyar.com.

BACKGROUND

It's hard for us to imagine a life without electricity, but roughly **two-thirds (35 million)** of Myanmar's population live without access to the national grid. For them, a lack of electricity means

- 10% of their income gets spent on basic lighting from candles and kerosene
- 1,000 productive hours lost each year
- Up to 50% loss of revenue from under-processed crops

In the face of these challenges, over 13,000 villages in Myanmar have built energy systems almost entirely on their own. With their own savings, rural electricians ("meesayar") installed diesel generators, distribution lines, and connections to the households in their villages. These independent mini-grids are estimated to serve 12% of Myanmar's off-grid population.

However, these meesayar get very little support on their remote systems, and face numerous challenges to keep the system running. Mee Panyar is a social enterprise that works with these meesayar to upgrade systems with solar power, and provides guidance on proper operations and maintenance to make sure the power stays on.

Mee Panyar has developed a basic mobile application that provides the record-keeping and technical tools to help remote mini-grid operators do their jobs. We need your help to take the app to the next level!

ROLE

We are looking for an experienced Android mobile developer to lead the app transition from the current no-code platform to a native app. The developer will be responsible for the development and delivery of the new native app, with additional opportunities to be involved in driving the strategy for new functionality.

The Remote Minigrid Operator app will function both as a content app to allow for routine and incident record keeping, as well as the interface to aggregate technical resources, display live power electronics data, and guided work prompts to support and follow-up with on-site maintenance.

front-end to a remote database of technical resources where data on the app will sync with a back end infrastructure linked to the mini-grid power electronics.

MAIN TASKS AND RESPONSIBILITIES:

- Adapt the existing no-code mobile application into a native Android product
- Deliver through the process of build, deploy, test, release, and additional updates to the app if needed.
- Optimizing the performance of the app for low data latency environments
- Create and maintain a robust framework to support the app
- Develop application programming interfaces (APIs) to support mobile functionality
- Work with the Myanmar product team to create compelling and customized user interfaces and experiences
- Work directly with Myanmar-based community managers and “meesayar” partners to test and realize products

VOLUNTEER CRITERIA:

- Proven mobile development experience – native Android or cross-platform
- Published examples of mobile applications on the App Store or the Android market
- Strong design and programming skills in either Java or Javascript and React Native
- Knowledge of MySQL or similar database management system
- Experience with third-party libraries and APIs (additional bonus if familiar with IoT)
- Comfortable using version control (e.g. SVN), Git, or GitHub
- Passion for empowering others and giving back
- Superior analytical skills with a good problem-solving attitude
- Ability to perform in a team environment
- Strong oral and written communication skills

BENEFITS:

- Contribute to a published mobile app that will be used by rural technicians!
- Working with closely with a passionate and international team with decades of experience in energy access and capacity building
- Opportunity to visit Myanmar and solar mini-grid sites with the local Mee Panyar team (post COVID restrictions)
- Flexible working schedule