



**HEALING WATERS**  
INTERNATIONAL

## Android App for Safe Water in Africa

### Client:

Healing Waters International

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Healing Water is a charitable organization based in Golden, CO. We work around the globe to provide affordable access to safe, high-quality water to over 100,000 people. A few months ago we distributed our 1,000,000,000<sup>th</sup> liter of safe drinking water.

### Background:

Several masters-level CS students at Mines have worked over the last few semesters to create computer vision algorithms to read the pressure gauges and flow meter on the front panel of our SolarPure Water Treatment System.



### Scope:

We're looking for a team of 2-4 students to port the algorithms to a user-friendly Android app that:

- Calculates and displays the flow rate and pressures
- Sends results to an online database
- Calculates resistance in each filter and recommends maintenance procedures to the operator (logic provided by Healing Waters)
- Provides other reminders and instructions on system maintenance such as a daily checklist (content provided by Healing Waters)

### Other Comments

- We are flexible on many design aspects and look to CSM students for creative solutions
- We anticipate most work being done off-site, with regular access to the equipment at our Golden office for testing.

