



CLIENT

www.rach.io

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ABOUT US:

Rachio is building irrigation controls and sensors for the modern world. Our first product, Iro, is a WiFi based smart irrigation controller. Our smart controller knows about weather and seasonality, and adjusts accordingly. It also learns as you teach it about unique characteristics in your yard and continues to modify your schedule as it gets smarter. An emerging market is growing called 'The Internet of Things' (IoT) which is predicted to include over 9 billion connected devices by the year 2018. We plan on being an integral part of the IoT ecosystem.

SUMMARY:

The Iro, our WiFi based irrigation controller, has many moving parts. From smartphone applications, to cloud based RESTful APIs, to the hardware itself. This makes testing the end-to-end functionality extremely difficult. We currently have a highly sophisticated test harness built to execute and validate a large number of events through the Iro. We are able to test some functionality through the Iro, but a large part is still manual regression tests. Here are some examples that are currently not able to be tested in an automated fashion:

- The Iro loses WiFi connectivity, do sprinkler schedules run while it is disconnected from WiFi?
- The Iro is powered off and on, the WiFi connection is not available, do the sprinkler schedules still run while it is disconnected from WiFi?

There are some amazing opportunities to use other IoT devices to help us simulate power loss, WiFi disconnections, etc. to fully automated our entire suite of tests and never have to manually regression test the Iro again!

REQUIRED SKILLS:

- Basic knowledge of Java or Groovy
- Desire to learn about other IoT programmatic APIs
- Creative problem solving and willingness to break things!
- Interaction with RESTful services

STUDENT BENEFITS:

- Real-world project working on a team with over 60 years of professional development experience
- Program directly to our Iro device using a language similar to JavaScript
- Learn one of the most powerful dynamic languages for the Java platform called Groovy
- Use a highly expressive testing and specification framework called Spock
- Gain experience leveraging a robust RESTful API

LOCATION:

1435 Stuart Street, Denver CO (2 miles West of Downtown Denver)