## 2. OVERVIEW OF PROJECT & JOB ROLE

My internship mainly dealt with the Battery Testing apparatus and setup of the cloud architecture associated with this application. The entire architecture of the server and the related networking hardware is implemented AWS. AWS is a platform which allows its users to manage any type of computing resources required to keep any application running. Being the only pure software engineer, I was responsible for setting up servers from scratch. This includes the firewalls for security, the failover architecture, the internal networking of the virtual private cloud and maintenance of these resources. This was critical to the development process and for load testing, as all the extreme cases of usage needed to be considered.

In my internship, I also developed a fast responsive, modern web app based on the data generated by the IoT hardware. This was critical for the visualization and decision-making process of the type of batteries used for any given purpose. This is not only useful right now, but also for all the various upcoming battery technologies. This required that the software should be open to upgrading as time passes on and that required that I follow the best practices outlined by some of the industry's best.

As a part of my internship I was also expected to interface with some of the people who are pioneers in the field and gain knowledge which aided the direction of the application that was developed.

Another aspect of my job role was the interaction with different team members, to have a deep understanding of the product. This involved explaining the technical intricacies of software development to team members who weren't previously experienced with software development or computer engineering in general. The knowledge transfer that took place was an important step for the entire team to have a better understanding of the ecosystem of development of this application.