## **Executive summary**

Old Dominion University is one of the premier universities in USA. It is a public university in Norfolk, Virginia. It is a dynamic public research institution that serves its students and enriches the Commonwealth, the nation, and the world through rigorous academic programs, strategic partnerships, and active civic engagement.

It was indeed a great experience in completing 4 weeks summer research program. It was a very good opportunity in experiencing The US work environment, their culture, food, etc. We were given two projects, one from a company called PRA and the other was a research project under Ajay Gupta sir. The PRA project was 'Repository Generation System', where we were instructed to create templates for repositories present in GITHUB and build and deploy it using a software automation tool called Jenkins. The research topic was aggression detection and intervention in Alzheimer'. We were provided with a smart google pixel phone and smart Fitbit watch in order to detect and analyse the aggression in Alzheimers. We had to use the sensors in the phone and the fitbit watch, create fitbit app and android app, fetch data from it and analyse the data.

To maintain an efficient working environment and to keep track of every interns work and to finish the project on time Agile Technology was implemented. This was something new to us. We got industry level exposure to agile method of working where there were scrum cycles lasting for 3 days and scrum meeting held everyday to monitor our progress. We used a website called Meister task which had an individual accounts for us designated to a particular group .It was responsible in monitoring our tasks. We were divided into groups of five.

The tasks assigned and completed by me in PRA project was

- Attaching the authentication feature of Recaptcha to the login page.
- Editing the templates (user is given a choice to be able to edit and use templates according to their choice)
- Installing Jenkins and creating jobs on Jenkins for the repositories created on GITHUB.
- Processing and deploying of jobs from Github to Jenkins.
- The tasks assigned and completed by me in AD project was
- Development of Android application for voice recording in order to capture audio clip. It has record, play and pause options.
- Research on android app to voice analysis.

- Use of EDA in detection of alzheimers.
- Research on fitbit APIs and ide and Extraction of data using APIs.
- Research on Principle component analysis in Machine learning.

Finally, works of all the members of our team was then integrated to produce a final result. It was an enriching experience as I got to learn a lot technically and had a chance to improve my basics. This opportunity helped me mold my character, learn to work in groups and improve my collaboration skills, be independent, experience US work culture.