Hack4Easy – 5G Analytics

Team Name:
Aggies
Purpose and objective
Goal Statement:. The 5G Network, unlike the 4G Network can be considered a heterogenous network due to it being an umbrella of technologies such as LTE-A, LTE-M and NB-IoT. Since the network is heterogenous, a lot of devices will be connected to it and the bandwidth would be limited. In addition to this, the data from this would be sent to the cloud which would increase the security risk for the data. Instead, we can use the 5G Antenna as the Server to perform analytics on the edge. Algorithms such as Kernel Ridge Regression can be used on low power servers on the Antenna since it doesn't require a lot of computational power. The analytics will thus be done quickly since it is on the Edge and it will improve the security as well, since the hacker needs to be close by. Any heavy processing required can be sent to the Cloud, but since most of the Analytics soon will be done on the Edge, this wouldn't be an issue.
Business Case
- **Benefits / Values / Savings:** **Immediate: This will boost the development of the Smart City and the Industrial IoT Project and will add an extra layer of security to the data** **Ongoing: New algorithms will be developed to make this system more efficient** **Maximum: This can also help in dynamic allocation of bandwidth and will help us with the preventive maintenance as well**

Team Members	Top risks to prototype
Mayuresh Hooli, Nirav Gohel, Narendra Tilwani	*Funding, People, Organizational Support.*
Resources / Tools Needed for prototype	
Software Developers, Data Scientists, Solution Architects	