Applying machine learning to extend independence and give loved ones increased piece of mind.

25-50%

“By the age of 85 years and older, between 25 and 50 percent of people display symptoms of dementia…”

Our Project

1) Collect GPS data from a users phone
2) Send that up to a server
3) Using machine learning, form a baseline of the individuals habits and routines.
4) Detect anomalies and respond. First by asking the user if they need assistance, then by messaging a loved one to inform them of the users location and situation.

How far did we get?

1) Using python, wrote a script to generate simulated GPS data to train our model on.
2) Began work on training a model also coded in python.
3) Wrote a simple app for an iPhone using Swift that provided GPS data
4) Setup a simple server with PHP and a SQL database that can receive and store the GPS data from the phone.
5) Using Twilio, we were able to code a simple version of a text alert.

How far might we go?

We believe that we were able to make sufficient progress during this hackathon to see that this project meets two important criteria:

1) It is something that is achievable.
2) It is something that could really help people.

We will look into pursuing this application when we return to the University of Delaware. We believe that it has great potential to help a lot of people for little to no cost to them. Meanwhile, there exists a potential for a product like this aimed at workers in assisted living communities. An application like this that could be tied into a dashboard and give insights on all of the residence may help give greater care.