<First Meeting>

Logistics

Time:	4PM
Date:	09/26/16
Attendees:	Scott, Vijay, Andrew, Joe, Kunal
Please Bring/Read:	N/A
Teleconference details:	N/A
Meeting purpose	Introduce everyone, start project planning
Meeting Facilitator	Scott
Meeting Minutes Taker	Andrew Guthrie

Agenda

Item	Time	Agenda Item	Presenter
1	4pm	Introductions	All
2	5pm	Project overview/info session	Scott
3	5:30pm	Planning future meetings	Joe
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Weekly meetings	All	Weekly	Monday 4-5pm meeting, Thursday 3-4pm Lab time
2.	Advisor Meetings	All	Weekly	Thursday noon
3.	ETA of hardware from advisor	Scott	ASAP	Find out when we will receive our hardware from the sponsor.
4.	Create a Gantt chart with some preliminary tasks that we will have to complete.	Joe	ASAP	

Next Meeting Details:
Start talking about more technical details and how we are going to set ourselves up for success on this project.

Closed Actions

No	Action	Who	When	Status or comment

Notes:

Meeting agenda: First meeting, 9/12/16

Introductions

Project high level

Go over big email

Weekly meetings

o Once or twice a week?

Bi-weekly advisor meetings

Regular sponsor meetings

Notes:

Weekly meetings:

Monday 4-5pm main meeting

Thursday 3-4pm backup meeting

Advisor meetings:

Scott will email McNair about date/times:

Tuesday after D7

Thursday before, during, after

Scott will get an ETA on Hardware from the sponsor

Joe will make a Gantt chart

<09/19/16 Project Planning>

Logistics

Time:	4PM
Date:	09/19/16
Attendees:	All
Please Bring/Read:	N/A
Teleconference details:	N/A
Meeting purpose	Project Planning
Meeting Facilitator	Scott
Meeting Minutes Taker	Andrew

Agenda

Item	Time	Agenda Item	Presenter
1	4pm	Plan how weekly reports will get completed	All
2	4:30pm	Website planning	Vijay
3	5PM	All other Project Planning	All
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Receive radios	Scott	Unknown	Radios are in the mail. We are waiting to receive them.
2.	Set up Git repository	Vijay	Before next meeting	We need some sort of version control for our files.
3.	Hand draw website mock ups	Everyone, individually	Before next meeting	We will agree on a design
4.	Decide on a laptop to use as our remote development environment.	Joe	For next 1-2 weeks	We will need a computer for us to SSH into/use remotely. The machine must have an agreed upon OS with agreed upon software.

Next Meeting Details:
Go over website design mock ups and choose who will work on the site based on who has experience with sites and who thinks they can tackle the design we have decided on.

Closed Actions

No	Action	Who	When	Status or comment
	ETA of hardware from advisor.	Scott	ASAP	Radios are starting to be sent on their way to us.
	Create a Gantt chart with some preliminary tasks that we will have to complete.	Joe	ASAP	Gantt chart created and reviewed by the group individually. Schedule starts at end of month.

Notes:

Project Setup:
      Get Radio
      Documentation:
            Set up a git repository
            Establish unified project in git

            Website
                  Mockups by the weekend (9/24)
                  Maybe a Navigation Bar

      Set up an environment:
            Dedicated Machine to SSH - OSX/Windows/Linux
            Install GNU radio/IDE
            Using Teamviewer? SSH?

            Steps for establishing radio connection:
                  Set-up static IP
                  Ping radio (part of UHD)
                  Run sample (like a FFT graph)

      Starting W/ GNU radio:
            tutorials from ettus
            Do something basic in gnu radio and expand on it

      Set up transmitter

      Set up general spectrum analyzer
            Spectral analyzer

Isolate transmitter using reciever

Project:

What types of signals are we focusing on?
FM AM to start
Basic Digital modulation
Wifi
LTE
GSM
Are we using machine learning?

Antennae -> waveform (I/Q) -> ID signals -> ID modulation

Levels:
GNU radio
C++
Hardware Implementation (FPGA)

Current Plan: Start at GNU radio level, improve it with C++ and VHDL (hardware language)

<Website Review>

Logistics

Time:	4pm
Date:	09/26/16
Attendees:	All
Please Bring/Read:	Git documentation, project schedule
Teleconference details:	n/a
Meeting purpose	Choose a website design and plan further
Meeting Facilitator	Joe
Meeting Minutes Taker	Andrew

Agenda

Item	Time	Agenda Item	Presenter
1	4pm	Go over website mock ups and choose a design	All
2	5pm		
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Create git accounts individually so we can view the project repo	All	Before next week	
2.	Create an initial layout of the website using the design that we had chosen.	Vijay, Joe	Before next week	Use some online resources/templates if available. Make the site as nice as possible without reinventing the wheel.
3.	Choose some IDE options for development	Scott, Kunal	Before next week	Python, C++
4.	Research GNU radio tutorials	Andrew	Before next week	Report back to group with findings

Next Meeting Details:
Everyone report back with their findings and we will educate the other members
of the group so that we can use this knowledge for the rest of our project.

Closed Actions

No	Action	Who	When	Status or comment
	Set up Git repository	Vijay	Before this meeting	Git repository is created.
	Hand draw website mock ups	Everyone, individually	Before this meeting	Everyone came with mock ups that they drew for the site.
	Decide on a laptop to use as our remote development environment.	Joe	For next 1-2 weeks	We have chosen a laptop to use as our development/shared machine.

Notes:

Looking at website templates:

We all will create Git accounts and share usernames with Vijay

Joe and Vijay will create a mockup with website, start on setting up computer

Scott and Kunal will start looking at IDEs for python development

Andrew will look at GNURadio tutorials and check out documentation for the Radio APIs

<10/03 Meeting>

Logistics

Time:	4pm
Date:	10/03/16
Attendees:	All
Please Bring/Read:	Previously assigned reading materials
Teleconference details:	n/a
Meeting purpose	Further project
Meeting Facilitator	Scott
Meeting Minutes Taker	Andrew

Agenda

Item	Time	Agenda Item	Presenter
1	4pm	Review everyone's findings	All
2	5pm	Mention midterm report	Scott
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Everyone start thinking about the midterm and which sections they would like to contribute to.	All	Before next week	
2.				
3.				
4.				

Next Meeting Details:

Split up Midterm report. Everyone is done with their tasks for now, the next task is to tackle the midterm report together.

Closed Actions

No	Action	Who	When	Status or comment
	Create git accounts individually	All	Before this week	
	Create an initial layout of the website using the design that was previously chosen.	Vijay, Joe	Before this week	
	Choose some IDE options for development	Scott, Kunal	Before this week	
	Research GNU Radio Tutorials	Andrew	Before this week	

\<Midterm Report\>

Logistics

Time:	4pm
Date:	10/10/16
Attendees:	All
Please Bring/Read:	Review midterm
Teleconference details:	n/a
Meeting purpose	Divide up midterm report
Meeting Facilitator	Scott
Meeting Minutes Taker	Andrew

Agenda

Item	Time	Agenda Item	Presenter
1	4pm	Divide up midterm	All
2			
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Everyone do their section of the midterm	All	Before midterm is due	
2.				
3.				
4.				

Next Meeting Details:

Continue with the rest of the project planning .

Closed Actions

No	Action	Who	When	Status or comment
	Everyone start thinking about the midterm and which sections they would like to contribute to.	All	Before this week	

Technical Components Meeting

Logistics

Time:	3:00 pm
Date:	10/17/16
Attendees:	Andrew, Joe, Vijay, Kunal
Please Bring/Read:	Presentation
Teleconference details:	
Meeting purpose	Begin development of project components
Meeting Facilitator	Joe
Meeting Minutes Taker	Kunal

Agenda

Item	Time	Agenda Item	Presenter
1	3:00	Finding and Isolating Signals	Joe
2	3:20	Machine Learning	Andrew
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Midterm Report	All	All sem	Due soon
2.	Website	J/V	All sem	Due soon
3.	Finding signals	Joe	10/17	Solid progress
4.	Machine Learning	Andrew	10/17	Good progress

Next Meeting Details:

Next meeting won't be for a few weeks as groups get working on their components of the project.

Closed Actions

No	Action	Who	When	Status or comment

Status Update Meeting

Logistics

Time:	3:00 pm
Date:	11/7/16
Attendees:	Andrew, Vijay, Kunal, Scott
Please Bring/Read:	Current Progress
Teleconference details:	
Meeting purpose	Get a current status on technical work
Meeting Facilitator	Andrew
Meeting Minutes Taker	Joe

Agenda

Item	Time	Agenda Item	Presenter
1	3:00	Finding and Isolating Signals	Joe
2	3:20	Machine Learning	Andrew
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Final Report	All	All sem	On hold
2.	Website	J/V	All sem	Implement soon
3.	Finding signals	Joe	10/17	Evaling alts
4.	Machine Learning	Andrew	10/17	Finished tutorials

Next Meeting Details:

Next meeting will be towards the end of the semester, and focused on the final report and presentation.

Closed Actions

No	Action	Who	When	Status or comment
	TX Profiles finished on GNUradio	Kunal	End of the day	Completed

Final Report Meeting

Logistics

Time:	4:00 pm
Date:	11/21/16
Attendees:	Andrew, Joe, Vijay, Kunal, Scott
Please Bring/Read:	Midterm Report Feedback
Teleconference details:	
Meeting purpose	Go over and divide up report
Meeting Facilitator	Vijay
Meeting Minutes Taker	Andrew

Agenda

Item	Time	Agenda Item	Presenter
1	4:00	Final Report	Scott
2	4:30	Technical Work	All
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Final Report	All	All sem	Broken up and assigned
2.	Website	J/V	All sem	Being upkept
3.	Finding signals	Joe	10/17	Alternative chosen
4.	Machine Learning	Andrew	10/17	Isolating pertinent code

Next Meeting Details:

Skipping a week and a half because of Thanksgiving. The next meeting, Dec 1, will be the mainly about the final report and presentation.

Closed Actions

No	Action	Who	When	Status or comment

Presentation Prep Meeting

Logistics

Time:	3:00 pm
Date:	12/1/16
Attendees:	Andrew, Joe, Vijay, Kunal, Scott
Please Bring/Read:	Presentation
Teleconference details:	
Meeting purpose	Go over and divide up presentation
Meeting Facilitator	Kunal
Meeting Minutes Taker	Scott

Agenda

Item	Time	Agenda Item	Presenter
1	3:00	Final Report	Scott
2	3:15	Final Presentation	Kunal
3			
4			

Open Actions

No	Action/Discussion	Who	When	Status or comment
1.	Final Report	All	All sem	Almost done
2.	Website	J/V	All sem	Being upkept
3.	Finding signals	Joe	10/17	Solid progress
4.	Machine Learning	Andrew	10/17	Good progress

Next Meeting Details:

End of semester.

Closed Actions

No	Action	Who	When	Status or comment
	Final Presentation completed and slides are split amongst the team	All	End of the day	Completed