#### EE 491 WEEKLY REPORT 7 Date: 10/18/16-10/24/16 Group number: 22

Project title: Smartphone based nano-device for human breath sensing Client &/Advisor: Prof. Long Que

Team Members/Role: Jared Smiley-Team Leader, Zhaobo Huang-Webmaster, Mengzhou Sha-Communication Leader, Concept Holder-Xin Chen

#### Weekly Summary

This week we created the matlab code to graph frequency of the picture based on the position in the image. Additionally we put the finishing touches on the project plan and started working on the design document. We also started researching color based frequency calculation in case using the diffraction angle and the location on the image isn't accurate enough to determine frequency.

### Past week accomplishments

• Xin: Debugged and found fixes to matlab code, wrote design section of design doc

• Mengzhou: Researched matlab code solutions, wrote introduction section of design doc

· Zhaobo:started researching color based frequency calculation, wrote deliverables section of design doc

- Jared: Wrote code to find frequency based on image position, proofread and tweaked parts written of project plan

# o Pending issues

## o Individual contributions

NAME	Individual Contributions	Hours this week	HOURS cumulative
Xin	Attended project work meeting, worked on Matlab code, wrote part of design doc	3	14
Mengzhou	Ditto	3	14
Zhaobo	Ditto	3	14
Jared	Ditto	3	14.5

## • Plan for coming week

• Xin: Transfer Matlab code to android app, discuss website plan, finish design doc, present finished matlab code to mentor, test code.

• Mengzhou: Transfer Matlab code to android app, discuss website plan, finish design doc, present finished matlab code to mentor, test code.

• Zhaobo: Transfer Matlab code to android app, discuss website plan, finish design doc, present finished matlab code to mentor, test code.

- Jared: Transfer Matlab code to android app, discuss website plan, finish design doc, present finished matlab code to mentor, test code.

# o summary of meeting with our professor

N/A