



Meeting Minutes

BEMOSS and Its Enhanced Applications

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Beginning April 2019

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Friday, April 26, 2019

Dr. Miah will write a research grant proposal under BEMOSS and is due May 3.

All documentation will be maintained in a github repository for this project. I need to create a Github account and send my username to Dr. Miah. A Google Drive with the same name as the Github repository will be created name DocsBEMOSS.

I need to talk to Mr. Mattus about getting a laptop for research. It must be installed with Ubuntu administrative privileges.

Send him an email:

Hello Mr. Mattus, I will be working on a project with Dr. Miah. For that we would like to request a laptop available in the department if possible so that we can install Ubuntu operating system.

Try to go see him in the afternoon.

I need to learn the following Github Bash terminal commands:

```
Git add  
Git commit -m "message"  
Git remote add origin 'url'
```

To get a better understanding of what is going on I need to go through Github tutorials.

Thursday, May 02, 2019

I met with Reece Bachman, Jordan Ingram, and Robert O'Malley in the lab with the intention of filming a video of the BEMOSS installation from start to finish. However, I misinterpreted Dr. Miah's email and thought we were going to install on the current laptop they have in the lab. Instead, I was expected to have received one from Mr. Mattus with Ubuntu installed. Robert showed me the motor setup with the Zigbee module, L298N dual H bridge module, and buck-boost converter. Later, Jordan demonstrated his work with the HVAC controller.

Friday, May 03, 2019

I still am in need of a laptop, so I must email Mr. Mattus once again on Monday, May 6.

Dr. Miah showed me some of the Github commands to upload `tex` and `pdf` files to the Github repo. We added the meeting minutes files `meeting.tex` and `meeting.pdf`.

Friday, May 10, 2019

Today, I met with Bob and Jordan to film the installation of BEMOSS on my borrowed laptop. After Bob attempted to install BEMOSS twice, he came to the conclusion that I installed the wrong version of Ubuntu on my machine. BEMOSS requires 16.04.5 not 16.04.6 that I had installed before the first installation. After another attempt at installing the software on Ubuntu 16.04.5, the same issue persisted involving three python modules not installing.

Wednesday, May 22, 2019

In this meeting with Dr. Miah, he gave me a flash drive with videos of the demonstration of the previous group's setup. Since I and the former students did not end up meeting in the lab to film the video on my borrowed laptop, they used their laptop instead. After unzipping the .tar.gz files, I was unable to view the videos due to some corruption issues. Dr. Miah said he had issues as well.

We discussed when I should work in the lab. He recommended 9 am to 5 pm Monday through Friday which I decided as my work time; however, the hours can be flexible. Likely, I will need to put in some hours outside of this time frame to get fully up to speed on the software.

Tuesday, May 28, 2019

I made some mistakes committing my changes to both the meeting and lab notebooks. My commits were not visible after push them to the repository. I will have to research this further but for now I must use the commands:

```
git add .  
git commit -m "insert message here"  
git pull origin master  
git push --force origin master
```

Look at bemoss presentation (Google BEMOSS slides first link). When I make presentation, no paragraphs on slides. No formal dress is required.

For BEMOSS applications, I need to read the paper [cite here Pipattanasomporn2015.pdf]. These applications are listed in the document.

Friday, May 31, 2019

We (RAM group) need to setup a common time to be in the lab. Also, after giving my presentation I found that I need to increase my knowledge of BEMOSS greatly and my presentation skills.

Tuesday, June 4, 2019

Add references to images. Next Presentation: how to install bemoss. Follow steps in bemoss wiki. Add own thoughts to slides not just copy from wiki. 201931-ProgressPres.tex. Next presentation will be 21st of June.

Move all materials from lab into Job 340.

BEMOSS work to be done:

1. Create functional icon for dc motor in BEMOSS UI to allow toggling on and off
2. Implement simple speed control algorithm within BEMOSS
3. Interface BLDC motor with BEMOSS
4. Researching agent based architecture with BEMOSS
5. Implementing basic machine learning algorithm within BEMOSS

Put personal contributions into list later.

A conference paper will be written in two months with DC motor interface icon in BEMOSS.

Write questions in notebook for meetings. Need to document everything well.

Need to be very confident in BEMOSS. May be presenting papers in conferences.

Improve speaking skills (i.e. talk louder, better eye contact, use figures on slides/poster to better point out what is going on).

Look at Markdown cheat sheet and write more in README in BEMOSS documentation.