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## EE/CprE/SE 491 BIWEEKLY STATUS REPORT 1

*January 13, 2020 – February 2, 2020*

**Group number:** 37

**Project title:** Open-Source Prototyping of Advanced Wireless Systems for Smart Agriculture and Connected Rural Communities

**Client &/Advisor:** Hongwei Zhang, Matthias Sander-Frigau

**Team Members/Role:** Zequn Wang – Meeting Scribe  
Dylan Sharp – Meeting Facilitator  
Jiawei Deng – Chief Engineer  
Zhenwei Su – Report Manager  
Shaohang Hu – Test Engineer

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### ○ Weekly Summary

For this week, we met with two advisors and talked roughly about the rest parts of our project, such as virtual machine, proof of concepted design and testing. In the following few weeks, we will focus on setting up QEMU to emulate the hardware under OpenWrt. At the same time, the proof of concept application will be the next big thing and we have started discussing with the advisor how to make it.

### ○ Past week accomplishments

None

### ○ Pending issues

None

○ **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Zequn Wang	Setting up QEMU	7	70
Dylan Sharp	Setting up QEMU and dig into linux wifi system	7	73
Shaohang Hu	Learning QEMU	5	69
Zhenwei Su	Learning QEMU and discuss with advisor about the proof application	6	70
Jiawei Deng	Learning QEMU	5	72

○ **Comments and extended discussion**

Because we can find two laptops with the same network card, ath9k\_htc, we have to using QEMU to emulate the hardware for running the code and application. The process of setting up QEMU and QEMU will probably run on the powerful computer, so we need to get access to use the network lab in Coover.

○ **Plans for the upcoming week**

- Try to set up QEMU successfully and figure out how to run OpenWrt on it. – Jiawei, Zequn, Dylan, Shaohang
- Get more hints or details about the proof of concept application and share it with other group members. – Zhenwei