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Robo-Ops, Professor Deconinck
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Miterm Statement

I am taking Robo Ops for 3 credits. So far, I have worked an estimated 8-10 hours a week on average over the past weeks.

Thus far I have been involved in many aspects of the project:

On a high level, I participated in the initial organization of the project by creating our Github organization and adding everyone as well as creating our Slack and sending out email invitations for that. I also drafted out coding style document to ensure that we have consistency across the project's codebase. Besides these, I have attended and been engaged in all meetings thus far.

On a lower level, I wrote nearly all of code for the dashboard. I designed the software architecture as well as the user interface for it. On the architecture side, I implemented a modular pluggable system using React.js and Redux.js (Node.js frameworks) to ensure that adding new widgets to the dashboard is a breeze. I also wrote the rules for the linting system to ensure that the code stays clean and bugs are caught before they reach production. I also wrote a mock API that ensured that the dashboard could get off the ground working before our servers were ready. On the user interface side, I wrote all of our CSS, chose the framework we use (Semantic CSS) and chose the look and layout of the dashboard.

I also wrote a good deal of the server side code. I worked with AJ to develop our current approach for moving data from the Pis on the rovers to our server and then from the server to the front-end. We heavily rely on streams through sockets and I wrote most of the code that runs on the server to receive data from the rover and serve it to the web and vice versa. In addition, I wrote the REST API that the front-end polls for data updates every second.

Besides writing a great deal of code for many of the software systems involved in this project, I have also served as support for other students. I have been teaching Daniel how to write Node.js and React.js so that he can contribute on the dashboard and I have also worked with other students who had questions when in the Makespace.

I would give myself an A right now in Robo Ops. I have been very engaged in the project and I have tried to drive a lot of the engineering that has gone into the project thus far, especially on the software side.