EE/CPR E/ SE Bi-Weekly Report 2
Sept 14th - Sept 27th
Group Number: 08
Project Title: Artificially Intelligent Requirements Analysis Tools
Client & Advisor: Collins Aerospace & Dr. Simanta Mitra
Team Members & Roles:
- Ryan Cerveny: Scrum Master, Meeting Scribe/Facilitator, Project Lead, Communicator
- Apurva Patel: Project Lead, Report Manager, Technical Support, Communicator, AI Training Lead
- Jonathan Murphy: Testing Engineer, Researcher, Requirement Lead
- Takao Shibamoto: Chief Engineer, Researcher, UI Lead

Bi-Weekly Summary:

Takao and Jonathan continue to research and experiment with the ML concepts of LSTM and XGBoost to aid Collins engineers in the development of the AI portion of the project. Ryan and Apurva continue to build the UI. Takao and Jonathan plan to briefly change focus to help with front end development during the upcoming week. A detailed description of each team member's accomplishments over the past 2 weeks can be found in the table below. We also met with our advisor to discuss how to approach challenges we are having with the project such as a lack of access to training data. After meetings with our client, we determined a different and more consistent communication plan with Collins may be necessary going forward.

Past Week Accomplishments:

Experimentation and research regarding RNN's, specifically LSTM networks, and how they can be applied in the context of our problem.

Individual Contributions:

Name	Individual Contributions	Hours	Hours Cumulative (continuation)
Jonathan Murphy	Working on the ML portion of this project has required a lot of research so far more than implementation in order to fully understand the concepts of different ML models and determine if they are feasible solutions to the requirement	12	Approx. 125

	tracing problem. Most of the past 2 weeks was focussed on researching Long Short-Term Memory (LSTM). → Researched ML applications of Recurrent Neural Networks, specifically focussed on LSTM. → Wrote some experimental programs to further understand using LSTM for NLP (nothing that can be implemented in the project, but for research purposes) → Reviewed the current status of the Collins LSTM implementation. → Continued experimentation in Jupyter notebooks provided by Collins		
Apurva Patel	→ Django Rest Framework Set up → Backend Programming	15	135
Ryan Cerveny	→ Learning React frameworks for developing the site → ReactJS experiment and routing	12	Approx. 117
Takao Shibamoto	- Wrote a UI specification document - Planned to implement the prototype on Sunday	10	117

Plans for the Upcoming Weeks:
- Work on front and back end development of the UI
- Continue ML research and experimentation
- Complete P.I.R.M presentation
- Meet Dr. Mitra and Collins Aerospace representative