**Mei Yang**

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# Goals

Research on the possible verifications needed for the project and possibly meet with Professor Kan to discuss the sampling rate as well as the testing strategies.

# Problem

For RF waveform reconstruction, a signal generator will be created to simulate the RF waveforms at a certain sampling rate. We will consult with Dr. Kan to determine a high enough sampling rate such that the reconstructed RF waveforms are close to continuous as possible and are of the form Asin(**ω**t + φ). In addition, we would want to search for simulation models as well as testing strategies to verify the functionality of the solution.

# General approach

Research references online and speak with Professor Kan. However, I wasn’t able to meet with Professor Kan as I was not on campus since last Thursday and when I stopped by his office on Wednesday, I think Professor Kan already left campus.

# Planned Course of Action

From Julian’s email sent last week, it seems that Professor Kan will be out of town this week. Therefore, I was hoping to continue researching possible reference papers online and meet with Professor Kan when he gets back. In addition, I will start writing Matlab code even without the sampling rate known yet. I’m also compling a list of questions to ask Professor Kan during next meeting.

# Resources and relevant Forum Posts

# <https://dsp.stackexchange.com/questions/33684/how-to-reconstruct-rf-signal-using-iq-data>

# <http://ieeexplore.ieee.org/document/6562670/?reload=true>