Tentative Team Name: Coast Masters

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What the project is about?

The intention of this project is to build a platform that analyzes the quality of a presentation. This could be used in a personal, educational, or enterprise setting, as the need for quality presenters is universal.

Why is the problem important?

Consider Toastmasters. It exists to help people give presentations: at work, at a wedding, and so on. Presentations are a critical part of life, and yet those skills are not taught in school. We need an accessible and universal presentation tutor.

To further recognize the importance of this problem, just think, how many bad presentations have you seen this year?

What problem the project is solving (what is innovation, the science, and new core technical advance)?

Our project is solving a problem with soft skill development. The ability to get feedback on a skill like this is often time consuming and expensive, and requires more than one person. Our product will allow training presentation skills to be much more accessible and practical to the average presenter.

Additionally, we can use a data-oriented approach that human feedback would only loosely deliver. For example, we can show exactly where the presenter was standing at

any point, as well as their intonation and hand positions. We can summarize these and other factors using numerical statistics.

How is the problem solved today?

This problem is currently unsolved. There are analog methods (Toastmasters, communications classes, textbooks) and some digital methods like online classes. However, there are no machine learning tools or web platforms to analyze presentations and give feedback.

Identify the outcome of the project:

The MVP for this project would involve a thin-client web application that records your presentation using any webcam >= 720p, then gives feedback and analytics on that presentation. Those analytics would include things like position of the speaker, volume changes, and emotional insights on the presentation script.

Initial Project Milestones:

A web interface
Pass video/audio from webcam to server
Decouple video and audio
Video analytics (position of speaker, gesticulation, etc.)
Audio analytics (volume changes, pitch changes, consistency in pacing, etc.)
Submit script to server (or STT analysis)
Sentiment analysis and other NLP

Stretch goals:
User Profiles that tracks improvement
Training modules, give the user a script and have them present it

How do you plan to articulate and design a solution:

Daily scrum meetings
Weekly meetings with LogMeIn team

Slack channel communications

Github code submissions

Short API test runs

Demos at the end of each sprint