



Field Session 2019
Colorado School of Mines

Company Overview

Woot Math is an Educational Technology startup located in downtown Boulder, Colorado. We are passionate about both education and software, and we are focused on developing new technology to help teachers help students. For the students that join our team, we offer an opportunity to not only build world-class software, but also the chance to have a real impact in an important context as well as the opportunity to work with a very talented and experienced engineering team in a fun, high-energy environment.

Project: Feedback Entry Web Application

Help us augment Woot Math's award winning and market leading platform. Every day Woot Math is used by students worldwide to express their mathematical thinking while solving rich interactive math tasks on a digital platform. Our teachers and instructors often ask how I leave feedback for my students based on the work they have done. The lucky team gets to help us build this technology. You will build a client side web application for feedback entry with UI/UX directed by our awesome creative director, you'll learn about server-side technologies for persisting and accessing feedback. Along the way you'll learn about programming on modern ES6 javascript or cross-compiled languages like typescript, modern JS application frameworks and well as how to build an API using Apollo GraphQL connecting to modern server-side technologies that underpin the modern mobile web. A stretch goal for this project is the addition of dynamic feedback in the form of recorded video or audio feedback that is synchronized with the playback of the actual modifications to the feedback layer using the communication APIs from Twilio's PasS (platform as a service)

Key Technologies

There are a number of emerging technologies that will be leveraged for this effort.

- Develop mobile web technology for interactive content that can be delivered in a device/platform agnostic way.
- Express framework and Node.js for web services.
- GraphQL based application server endpoints.
- NoSQL web-scale data and storage, MongoDB, Redis
- Cloud hosted, containerized (Docker) production application workflows.

Location

Flexible. The team will be expected to travel to Boulder for meetings and mentorship. Working independently or as a team in the Golden area will be acceptable. Students will be required to provide their own computer.