

Smart Barbell Proposal

Background

The Smart Barbell project is the project our group of EDNS251 students chose to work on throughout the 2024 spring semester. The goal of the project is to create a barbell that can track the levelness of the barbell and counts repetitions as you're performing any type of lift.

Project Description

The Smart Barbell aims to enhance safety by recording and displaying the levelness of a barbell using inertial measurement units (IMUs) to prevent injuries associated with uneven weightlifting. This project focuses on creating a user-friendly mobile app to display the information collected by the IMUs. The project will combine research and collaboration with fitness experts to set a new safety standard in weightlifting.

Desired Skill Sets

We are looking for a team with beginner weightlifting knowledge and with an interest in app development.

Preferred Team Size

3-4 students.

Work Location

Mines Campus or Remote

Client Liaison

- Nikita Hanov
nikitahanov@mines.edu
(913) 953-7921

Additional Contacts

- Allie Lundgren
amlundgren@mines.edu
(949) 584-3424
- Aksel Richard
arichard1@mines.edu
(713) 826-5108
- Callie Fuhr



cfuhr@mines.edu

(719) 323-8904