**Project Summary**

Many athletes face barriers to receiving personalized coaching due to cost, time, and location constraints. Our project addresses this challenge by creating a web-based AI Sports Coach prototype that delivers real-time, tailored coaching through natural conversational interaction.

Built on Visual studio code and ElevenLabs’ powerful conversational AI platform, our solution combines voice-driven dialogue with data inputs—including simulated wearable metrics and video analysis—to assess an athlete’s form, fatigue, and performance. The AI coach provides immediate, actionable feedback, such as technique corrections and adaptive training plan updates, all through a seamless, human-like conversation.

The platform features a consistent, motivating AI persona that guides athletes with clear, supportive insights, enhancing engagement and usability. We extended the core functionality with conversational goal logging and contextual exercise suggestions, showcasing both innovation and practical utility.

By democratizing elite coaching access, our AI Sports Coach empowers athletes to train smarter and safer without the need for costly, in-person sessions. This prototype exemplifies how conversational AI can transform sports performance by delivering personalized, data-driven guidance via an accessible web interface.

Our web-based prototype’s seamless integration of real-time data, clear feedback, and a personalized conversational experience positions it as a compelling solution worthy of recognition and advancement.