Tiilt Lab, Student Researcher, advised by Marcelo Worsley and Vishesh Kumar
- Engineered a robust data collection and preprocessing using Micro:bit and XIAO Seeed Studio boards. This process included the successful integration of accelerometer and magnetometer data, enabling comprehensive analysis of swim strokes.
- Developed and implemented advanced machine learning models, including Long Short-Term Memory (LSTM) networks, Convolutional Neural Networks (CNNs), and Dynamic Time Warping (DTW), to achieve a 95% accuracy rate in swim stroke classification.