

Sensible promotional video:

<https://drive.google.com/file/d/1vZ3NQz0cL4VWXQuDdVddHXjTEI92IxCR/view?usp=sharing>

Project description:

We are creating an app to collect data from the existing sensors on a phone. This includes sensors such as the accelerometer, gyroscope, and the microphone. Our app will collect data from these sensors and allow it to be labelled in real time all while it is being graphed. You can then export this data and use it for machine learning which is a timely technique that generally attempts to simulate biology to make predictions based on certain inputs. The purpose of our app is to give researchers a tool to allow anyone to easily collect data for their machine learning projects.

The Sensible project differs from existing smartphone sensor apps in two keyways: Labelling data during collection, and deliberately seeking to offer maximum sensor coverage. Most apps that allow the user to record sensor data do not try to support the widest array of sensors available on the device, and they provide no way for the user to label the data during collection, if at all. The Sensible application is also open source and free to download, therefore it is more accessible to any user with a smartphone.

To ensure users do not worry about the privacy of their data being collected, all data is stored locally, accessible only to the owner of the device unless they choose to share it via a third-party platform. The app will not transmit any collected data without the user's knowledge; as the project is open source, this fact will always remain verifiable. Local storage is very difficult to break into from outside applications and it would be very difficult for a potential attacker to be able to steal any user's personal information. Additionally, the data collected using the app is classified as non-sensitive.

Team biography:



Ryan Turner

Project manager, documentation, communication with shadow team



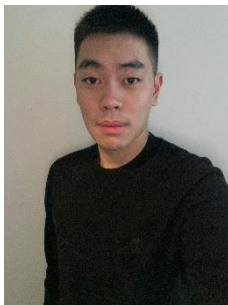
Ian Oxborrow

Frontend app development, screen designs, meeting minutes



Maddy Carden

Client liaison, documentation, test manager



King Ho Cheung

Frontend app development, presentation developer



Chathura Galappaththi

Backend app development, model development, quality assurance manager



Tristan Smith

Backend app development, sensor research, model development