Voice Analytics for Social Intelligence Platform

We are building a platform for emotional ‘remote sensing’ of social environments, which includes machine-learning-powered facial action-unit -based emotional analytics, physiological state data aggregation, fusion and inference, and – relevantly to this pr0oject – voice analytics.

One of the biggest challenges is tracking and analyzing voice samples in near real-time, so that we can extract emotional state-relevant data points such as:

1. Pitch and pitch range
2. Loudness and loudness range
3. Articulation
4. Rhythm
5. Emotionality (positive/negative; active/passive; dominant/submissive)
6. ….

As such, we are looking for engineers to develop a plug and play end-to-end voice analytics pipeline that takes an unprocessed, digitized voice signal and returns interpretable single or multivariate displays and analyses of emotional state-relevant parameters. We are looking for people with the following skill set:

* Experience in C/C++
* Programming digital video apps in Android/iOS
* Familiarity in working with device drivers preferred
* GIT and Documentation is part of getting it done
* Release early, release often mentality;
* Are a developer at heart, respect design principles and know your design patterns

***About the Mind Brain Behavior Hive***

We are a tri-faculty Institute at the University of Toronto <http://mbbh.resonatoragency.com/> whose mission is to re-design and re-engineer the learning processes of higher education by building on state of the art brain science, the latest advances in wearable sensing technology and adaptive learning algorithms (‘machine learning’, ‘deep learning’) to create platforms, products and experiences.

**To apply**: send CV, cover letter, and pointers to your code samples, portfolio or projects you have shipped to apprentice@mindbrainhive.org