End-to-End Implementation of a Social Intelligence Platform

In the course of decoding human emotions from behavioral data and specifically how people perceive, respond and react to other people’s emotions in a team setting, it is critical to capture people’s faces on video and (potentially) VR settings. The platform we are designing provides adaptive learning-based analysis of facial action units (AU’s) and voice signals to supply coaches and educators with an ‘emotional spectrometer’ of public performances.

We are seeking an end-to-end camera-recording-streaming-storage-display solution that wil make the platform easily deployable in organizational settings. There are numerous hurdles, eg:

* What hardware/software to use?
* Which video codec is to use to capture facial features while minimizing streaming bandwidth?
* Can it be done in real time, conditional on coder selection? If not, where should buffers be deployed and how should they be configured?

We are looking for engineers who can help develop a plug and play end-to-end 360/VR video capture/streaming/storage environment. The ideal candidate(s) will have the following skill set:

* Programming digital video apps in Android/iOS
* Familiarity with RTSP, H.264 (MPEG 4), H.265 (HVEC) transport streams
* Programming web apps involving HLS or MPEG-DASH would be ideal
* 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