

My honours research relates to the intersection of human and machine, specifically the idea of representation of identity in a transmediated world and privacy in an environment of pervasive computing that utilises wireless sensor networks and neural-net, machine-based learning algorithms that are intended to classify, predict and encourage types of human behaviour. Currently my research is limited to mobile phones, beacons and Internet-of-Things (IoT) sensors as generators of data points to be processed by networked machines. Surrounding this physical definition of parts and machine float the more human elements of privacy, behaviour and identity. While this may seem large in scope, my thesis itself will be focused upon a single, archetypal use-case consisting of a human carried mobile phone passing through a public space that has embedded sensors emitting near ultra-high frequency audio signals across its path. These signals invoke computational processes and network connections for the purpose of allowing communication between machine and machine, without user knowledge or interaction. This communication will involve descriptions (a vector of data points) of the user as they pass through the space and networked machines to attempt to determine/predict future user behaviour.

The precursor is not a prototype. The precursor is designed to raise questions and interrogate the concepts, assumptions and preconceived ideas. Conceptually the thesis will be, by necessity, grounded in engineering and computer science as that is the only logical perspective that I can utilise to ensure that understanding and claims are based upon a reasonable comprehension of this particular aspect of reality. The meaning of this, however, is not to be limited by that grounding, it needs to be contextualised and expanded within the field of human behaviour and identity.

To help determine what role privacy, identity and human agency may have in relation to my thesis, I devised a performance for my precursor that demonstrates human interaction with machine. The machine, being a networked computer, was programmed by the human, me, to create a poem. As it is not a computer that employs state-of-the-art algorithms to construct poetry-like verse, I manually programmed it to construct a verse by randomly selecting words from a vocabulary of 97,648 words. This procedural randomness was contained within an algorithm that was logically derived from an internet search for instructions on sentence construction.

Upon visiting the webpage that is the precursor, the page is rendered into human readable words that describe this process as well as the resultant poem. If the user presses a button labelled 'render' then the webserver machine makes the users web browser machine read the description and the poem out via a synthesized human voice. While reading this out, it plays the near-ultra high frequency rendition of the poem as well.

For the performance, this 'automatic' rendition was not enabled and instead I manually typed words into the voice synthesizer that formed a series (narrative) of questions and statements that were intended to reflect my own uncertainty about the relevance of certain conceptual problems to my project. The comfort of being in control of the process, even as a performance, is bound up with problems of identity and human agency, prompting the question: would the removal of this control be noticeable in any state. So for me, as the archetype in this instance, I would need to be in control, to ensure its subservience to my (human) will. To correlate my response to an array of other human responses, I need to bypass or ignore reflective reasoning and assume the mantle of dispassionate observer. The rationale for this, as far as I am concerned, is that I cannot be the archetype.