

DATE: March 3rd, 2015  
TO: Karen Sollins, Ellen Finch, Jared Berezin  
FROM: Skanda Koppula  
RE: A Summary of a new secure, distributed sensor network, *Sensible*

Together, Caroline Morganti, Lisa Ho, and Skanda Koppula propose a design for a system that will allow MIT to collect sensor readings from sensors placed around MIT campus in a secure, automated way.

We believe that our system is robust against data loss through its system of data block acknowledgements, secure against malicious, untrusted intermediates through use of encryption/authentication, and correctly handles ordered transmission of priority data.

Perhaps the weakest part of our design is the latency and throughput of data block transmission, which is bottlenecked by our acknowledgements system. Perhaps we can design better way to ensure accurate data transmission that doesn't triple the number of messages sent across the network.

We each worked individually contributing pieces of the final proposal. We worked separately using `git` and one large email thread. This model worked well for us.