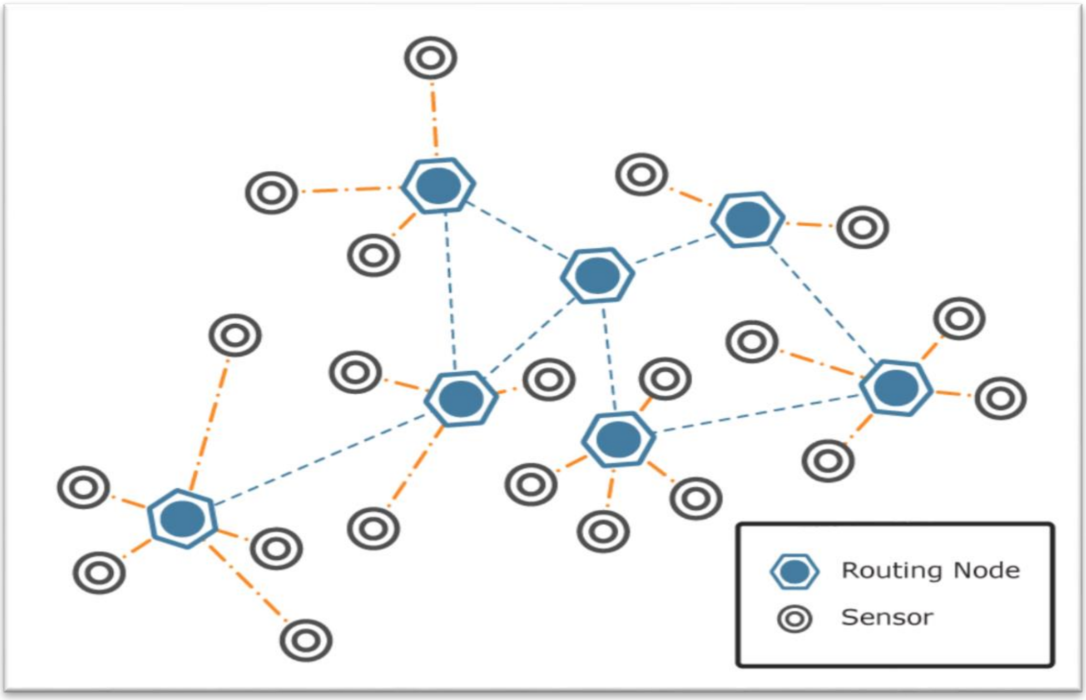
Distributed, self-discovering and self-organizing sensors

There are quite a few papers out there on how to achieve a distributed sensor network. We propose to use such a network to achieve a system that is more advanced than the sum of its components. The setup is very simple:

- Make a number of nodes consisting of a microprocessor, battery and antenna
- If they are in range of each other, they'll automatically form a network. If one node is removed, the rest will adapt



Here is where the interesting things start to happen:

- If the nodes have different capabilities, one can e.g. have a temperature sensor, another one has a light sensor etc Together they'll form a distributed computer
- Each of them could have a visual feedback, e.g. the LED hat that is shown above. The visual feedback will then reflect the status of the network, e.g. blink in sync with the other hats
- Another direction would be to let all nodes be LORA capable but only one of them serving as a master for the cluster, transmitting aggregated information from the network. If the master is removed, another node will take up the role as LORA master

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At the keyboard:

Gabriel.Ibanez@cybercom.com
Cybercom Sweden
Mobile +46722388479

Tom.Stromberg@cybercom.com
Cybercom Sweden
Mobile +46703791460

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