Sensors: What's hot and what's not – view to practical implementations & Trends - The IoT Forge Foundation

IoT Forge Foundation - IoT Paja Säätiö – www.iotforge.fi

IoTPaja säätiö
IoTForge foundation

The IoT Forge Foundation is a non-profit organization that operates independently, has its own staff, and supports companies working on any IoT development platform free of charge.

IoT Forge Foundation was established Sep 2017. We support Finnish SME and Start-up companies which works with IoT products and solutions. Focus is to speed up the time from idea to its validation and lower the owner risk level free of charge ie no commitments to stock, IPR and any new innovation stays in the customer company.

Three ways to speed up and lower the companys risk level 1. Personnel help 2. Lab Facilities 3. Monetary grant for early phase activities

- Highly skilled personnel of 7 spesialists.
- 600m2 laboratory
- Development equipment worth 2,5MEur
- SME & Start-ups
- Over 130 companies from over 20 locations around Finland.
- Free of Charge

The IoT Forge Foundation Team

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Everything Is Hot in IoT

Trends, View to Practical Implementation

- Sensor development: "standard" sensors vs "high end" sensors: data accuracy need vs cost level

- From sensors to sensor HUBs and connectivity boxes and data visualisation & cloud connectivity
  - Sensor availability improving fast
  - Multisensor hubs with connectivity

- Use of AI ➔ new innovation opportunity ➔ Impact to sensor selection and cost
  - Use of math (AI) brings good visibility to sensor data visualisation even with low accuracy sensors.

- Selection of IOT sensor/sensor HUB processor platform and implications to SW development:
  - processor platform (fex. Rasp for demos) known SW asset but many limitations
  - Fully embedded system, C coding, very efficient but more difficult
  - Embedded system with RTOS support, (fex Arduino) efficient and less difficult than fully embedded.

- Challenges: Power management, connectivity selection, security, technology lifetime, update needs, service vs product sales.

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