

GoBonkersWithIoT – Show your most creative IoT side

2-LINER Description: Show your creativity, knowledge and skill in one domain of your choice (office improvement, automobile, home security) using Arduino's, Raspberry Pi's, a cloud backend and messaging technologies such as MQTT and Kafka.

Description of the assignment

- At ToThePoint we greatly appreciate each others creativity and aspiration to realize fantastic new ideas. In this fashion we recently created a scalable video wall with 54 (!) gaming keyboards of which we can control its individual RGB led lights through Kafka to showcase foto's and video streaming. What's better is its ability to even 'look' at you and respond to movement, sounds or the simple press of its buttons (a.k.a. 'pixels'). At the source of these ideas are purely creative ideas that come into realization within ToThePoint.
- We want to spark the same creativity from within you when we invite you to start working with microcontrollers, start using a cloud backend from which you can build and deploy your services, explore different messaging infrastructures (Lora, Kafka, MQTT, ...) to surprise us with an impressive marriage of hardware and software in which IoT, (Big) sensor data, edge computing and backend (stream) processing play a major role. The application area of your creation is free to choose by you.

Doelstellingen

- You will design an IoT architecture with equal attention for hardware, energy, scalability on the software side.
- Development of a backend business logic
- Development of a hardware prototype
- Let your creativity roam

What will you gain?

- You will learn to start prototyping to eliminate beginner mistakes
- Real time data captation and processing
- The ability to explore the possibilities and limitations of sensors
- That lovely feeling you get knowing your design will actually be used to create a product, if you are capable of delivering something interesting enough

What do you need?

- Creativity and the will to succeed
- A motivated personality that can handle setbacks
- You see the bigger picture when it comes to making software and hardware work together
- You want to learn everything about real-time data and stream processing
- You can't wait to learn a heck of a lot in a relatively limited time period.

Location of your assignment:

- Veldkant 33B, 2550 Kontich

Your mentor during the assignment

- Steven Heyninck – Business Unit Manager ToThePoint

Technologies you will be using

- Microcontrollers
- Spring Boot
- Cloud backend
- Messaging infrastructure
- You fill in the rest!