

Meeting minutes

Date & Time: 20.01.23 10:00 am to 11:00 am.

Team: Jon Jahren, Ådne Kvåle, Abdul Majeed Alizai, Even Jørgensen, Sindre Nes, Martin Børte Liestøl.

Customer: Jan Dyre

Internal supervisor: Vimala Nunavath

Agenda:

The main topics discussed at the meeting included:

- Recapping the key points from the last meeting
- Researching the difference between on-edge computing and computing on the Raspberry Pi
- Discussing the general architecture of the system, focusing on the strengths and weaknesses of different approaches
- Utilizing a tripod to benchmark different approaches.

Requirements from KDA were also discussed, with a focus on achieving real-time performance as much as possible. The team also discussed the Dronesonen system, which includes 8 cameras broadcasting on the UDP protocol and converts the information from the cameras for use by the drone. The PX4, a Raspberry Pi motor controller, was also mentioned, with Navio sending information to it at 50 Hz and the cameras sending information at 33 Hz. There is currently some delay in receiving position information from the cameras to the drone, and the team is working to control the drone using angles. Find out where and which delays occur in the system and how to optimize that. Dedicated hardware for different sensors is also a focus, with an emphasis on the architecture and using a tripod to benchmark different approaches.

In terms of hardware and software, the Pix Racer and Pix Hawk 4/Mini were discussed. Jan is also planning to bring a colleague from KDA to the next meeting.

Next meeting: 27.01.23 10:00 am