Me

* Final, specialize, small, underwater, sensing, manoeuvrability
* Courses, DSP, C, pave
* Topic, LBL, dead-reckoning, engage, accomplish
* NTNU, solidify, courses
  + Ele, power electronics, simulation
  + Underwater, theoretical, site, problems
* University of Strathclyde, expand, different
* Strong foundation

Why Ph.D.

* Depth, improve, intellectual curiosity
* Intense, Eye-opening, first-class, cutting-edge tech
* Learn, sharpen
* Rewarding, long-term rewarding

Strengths

* Strong foundation
* Practical hands-on experience
* Work ethic, dedication, attitudes
* Patience, positive attitudes

Weakness

* Mainly focused on underwater things, but sensor up air is learning, transferable skills
* Paper, visual analytics (VA), SQL,
* Less exposed to sensor fusion
* Communication skills

Why passionate

* Sensors crucial, eye / ear
* Milestone for autonomous
* Why choose master, and do not hestitate Ph.D.

Difficulty

* Technically, noise, sensor fusion, interference,
* Personally, weather in Norway,

Impact

* Quality of input, decision support system
* Stone for full autonomy

Bring research

* Bridge the gap of simulation and experiment – motivation
* Facility, expertise,
* Ready to learn and improve

Why NTNU

* Distinguished international reputation, practice-based training philosophy
* Ph.D. program, dept of ocean, satisfy my every expectation of pursuing my future research
* Advanced lab facilities
* International environment
* Close connection with industry

Match

* Specialization
* Sensor
* Signal processing
* Passionate about autonomous marine system

Q:

* Lab look like
* Ph.D. course for new Ph.D.
* Next steps of hiring process
* What are existing instrumentation

Main basis

* Given problem, freq-time-domain, one-multi-channel, filters
* Interpret results from signal analysis, spectra, correlation functions, frequency response
* Extract info about the studied signal, periodicity, time delays, linearity

IMU errors

* Bias
* Gyro drift
* Lever arm
* Magnetic disturbances