NOWITECH final event 22-23 August 2017

A story of a PhD-student

Øyvind Netland Cisco (previously NTNU and Norsk Automatisering AS) oyvindne@ntnu.no





Norwegian Research Centre for Offshore Wind Technology

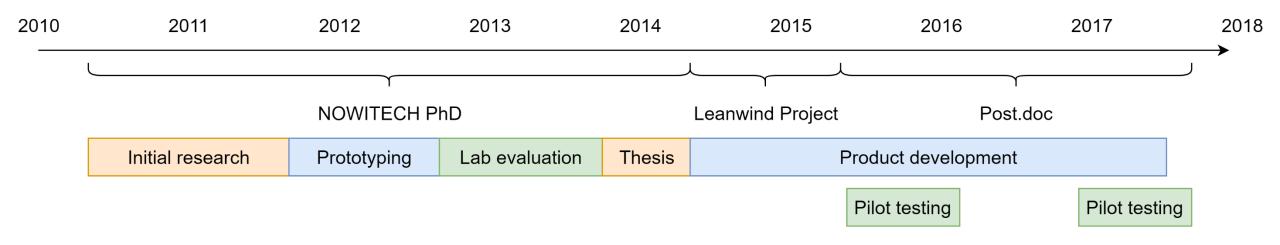


- Had worked at Kongsberg Maritime for 3-4 years, with ship automation systems.
- Wanted to have a more R&D focused job.
- Did not look specifically for a PhD within wind energy, but was very pleased when an opportunity within NOWITECH presented itself.





My Timeline

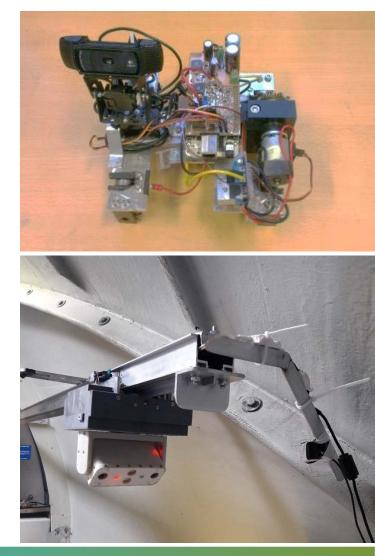






Short Description of my Research

- Inspect wind turbine with a sensor platform inside the nacelle. -> Remote Presence
- Possible advantages:
 - Reduce expensive maintenance visits.
 - Be better prepared for larger operations.
 - Check condition monitoring alarms to prevent false positives.
- Prototyping and lab evaluation in PhD
- Product development and pilot testing within Leanwind project and as post doc.







Activities Following the PhD

- Norsk Automatisering AS (NAAS) continued working on the concept.
- Participation in the EU project Leanwind.
 - Provided funds for further development and pilot testing.
- Got funding from The research council of Norway for a "user-directed innovation program".
 - Funding for one PhD, one post doc and further development.
 - Initialized a co-operation with various industrial partners.
- Created a spin-off company EMIP.





NOWITECH PhD

- Was a PhD at the department of engineering cybernetics.
 - Did not have any colleges that worked with wind energy.
 - NOWITECH allowed me to get to know other researchers within wind energy.
- Work package meetings
 - Organized NOWITECH researchers that worked with similar problems (in my case operation and maintenance).
- NOWITECH PhD meetings
 - Social events for all NOWITECH (and other wind energy) PhDs and post.docs.



Best experiences from NOWITECH PhD

- The ability to spend time on a problem or a technology that you just cannot do in a "normal job".
- Have a network of people with expertise within different parts of the multidisciplinary field of wind energy.





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The way forward

• I will start in a new job as embedded developer at Cisco next week.

- NAAS and EMIP is still working with this concept.
 - Contact information: Amund Skavhaug <u>amund@norskautomatisering.no</u> EMIP (emip.no) <u>post@emip.no</u>





