

## Jarle Vikør Ekanger

Instrumentation Engineering Specialist, MSc, PhD

Jeg lager løsninger for instrumentering og innsamling av signaler i kraftverk og lignende industrielle miljøer. Da jeg samtidig inngår i FDB sitt utviklingslag for programvare har jeg hele datakjeden fra sensor til sluttbruker i tankene når jeg utvikler mine løsninger.

I FDB har jeg vært med å utvikle programvaren HydroCord Server som er FDB sitt produkt for datainnsamling og datatransport. Jeg har laget modeller som transporterer data kontinuerlig og uavhengig av forskjeller i sikkerhetsnivå mellom nettverk for avsender og mottager.



### Erfaringer

- > Instrumentation Engineering Specialist, FDB (2016 ->)
- 🏢 Fellow at NTNU -PhD, FDB (2011 - 2016)

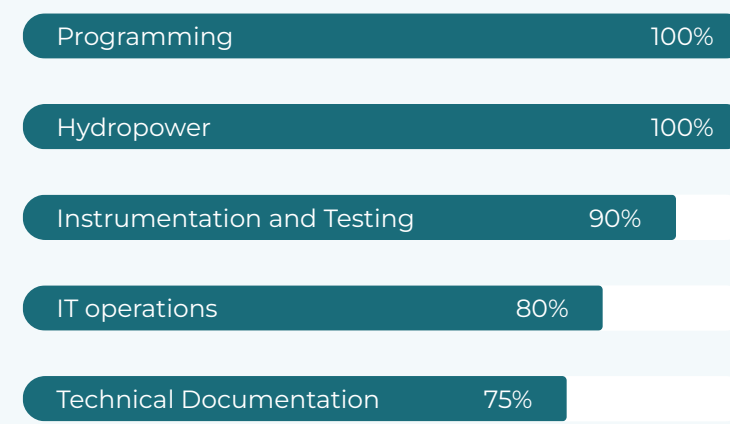
### Utdanning

- ▲ PhD, NTNU (2011-2016)

PhD "Investigation of the relationship between water quality variations and cavitation occurrence in power plants"  
NTNU,  
2016:26 <http://hdl.handle.net/11250/238>  
1870  
2011 – 2016

- ▶ MSc Energi og Miljø, NTNU (2005-2011)

### Kompetense



### Profesjonell kompetanse

- 🖥️ NI LabVIEW (NI FPGA)
- 📦 AutoDesk Inventor
- 🔌 Arduino
- 🔧 PCSchematic
- ! Visual Basic for Applications

### Publications

- Detection of Draft Tube Surge and Erosive Blade Cavitation in a Full-Scale Francis Turbine, Journal of Fluids Engineering Jan 2015-011103

## Portefølje

#### Main projects at FDB

- Cavitation monitoring, 2011-2016. Together with a hydropower operator and U of Catalonia- Barcelona (UPC)
- Development and implementation of innovative cavitation monitoring device for the hydropower business. The solution can be applied in any flow system experiencing cavitation.
- Head of instrumentation in the EU H2020 RIA project AFC4Hydro, 2019-2023. Responsible for HW-SW solutions for data acquisition and control. Development and construction of solution for laboratory and fields tests. Several field trips involving start-up of systems and eventual troubleshooting.

SW engineer for the development of FDBs data-acquisition solution, HydroCord. 2017-2025.

- Programming activities from maintenance of FDBs "modular architecture", on which HydroCord is based, to development of new features.
- Development of database solutions and database-HMIs for data-flows generated by hydropower operators.
- Lead developer for analysis plugin- functionality.