

Many years of R&D experience within control engineering and embedded real-time computing - notably within navigation, control of marine vessels, sensor systems, servo systems, mechanical and hydraulic systems. Experience from delivery and commissioning of complete control systems – in the roles of developer, project manager, team manager or technical manager.



Current and previous positions

- 2015 – **Norwegian University of Science and Technology (NTNU).**
Associate professor, teaching control engineering and automation at Dept. of Engineering Cybernetics.
- 2011 – 2015 **Fugro OCEANOR AS.**
Technical manager with responsibility for production, engineering and development within the area of oceanographic data buoys. These buoys are tailored with moorings, sensors and communication according to the needs of each customer.
- 2009 – 2011 **Norwegian University of Science and Technology (NTNU).**
Adjunct Associate Professor (20% position) within process control at Dept. of Engineering Cybernetics. Position financed by Siemens Oil and Gas Offshore as part of collaboration with NTNU.
- 2007 – 2011 **Siemens AS.**
Senior Key Expert within Advanced Process Control in Siemens Oil and Gas Solutions Offshore. Forming specialist team, and development of tools, within APC. Managing collaboration with NTNU within the area of Integrated Operations.
- 2005 – 2007 **TeraRecon, Inc.**
Technical Manager, Norway Office. Development of 3D ultrasound probe. Project management, integration into existing system. Microcontroller software.
- 2001 – 2005 **Eagle Ultrasound AS.**
R&D manager, co-founder. Specification and development of 3D ultrasonic probe. Mechanical design, embedded electronics and real-time software.
- 1999 – 2001 **Dynamica AS.**
Consultancy in control engineering and real-time programming. Varied assignments within vessel motion control, motor control and process control.
- 1997 – 1999 **ISP AS.**
Development of algorithms and software for navigational sensors. Miniature 3D fluxgate compass.
- 1995 – 1997 **Kongsberg Simrad AS.**
Development tasks concerning autopilots and systems for dynamic positioning of ships.
- 1991 – 1994 **Simrad Robertson AS.**
Development and project management concerning autopilots and complex marine control systems. Adaptive control, real-time programming, embedded hardware, dual communication networks.
- 1988 – 1991 **Norwegian Institute of Technology.**
Associate professor, Dept. of Engineering Cybernetics. Teaching and research within robotics, sensory systems and servo technology.

1985 – 1988 **Norwegian Institute of Technology.**

Research assistant, Dept. of Engineering Cybernetics. Teaching and research within robotics and servo technology.

Educational degrees

1985 – 1988 Norwegian Institute of Technology.

Studies for the dr. ing. (PhD) degree, Dept. of Engineering Cybernetics. Robotics, control engineering and computer science. Completed on time even though combined with fulltime employment.

1980 – 1984 Norwegian Institute of Technology.

Studies for the siv. ing. (MSc) degree, Dept. of Engineering Cybernetics. Control engineering and computer science.

Academic work

Lecturing.

Currently undergraduate courses TELE2001 Control Engineering, TELE2008 Control Systems, TELE3031 Bachelor Thesis Automation. Previously also TELE3011 Systems Engineering.

Management.

Currently member of management team at Dept. of Engineering Cybernetics, representing undergraduate education.

Curriculum management.

Currently member of programme committee for Bachelor education in electrical engineering at NTNU, Faculty of Information Technology and Electrical Engineering.

Project management

Collaboration, NTNU – Siemens Oil and Gas Offshore, within Integrated Operations. 2 faculties, 5 professors, 3 postdocs, 3 PhD students.

Supervision and co-supervision

PhD candidates: 4 (1 ongoing), MSc candidates: 7, BEng candidates: 24

Research interests

General control theory, robotics, marine control systems, power management, building control systems, engineering education.