



The engine that drives Nortek is its multi-talented, global team, comprised of people who are authorities in their field. A world-class design and development group, a client-facing sales team with direct technical industry experience, and a spirited support and production team define our ability to serve as well as collaborate with our customers. We are growing – do you want to have fun and make an impact? Do you want to work in a pioneering field with global reach?

Navigation Systems Engineer - Boston

Job Description

The Setting

Do you want to work in a fast-paced, "startup-like" environment within the security and savvy of a well-established industry leader? Nortek is expanding into underwater navigation and autonomy solutions for subsea robots. We are looking to grow our team of development engineers and scientists by establishing a new department in our Boston office to serve as the technical center of this new expansion. Located in the Innovation and Design Building in Boston's booming Seaport District, the office features neighbors in various sectors of technological development, easy access to public transportation, discounted Reebok Gym membership, several new eateries, and frequent social events.

This expansion effort builds on Nortek's long product history in underwater ultrasound and our success in developing and manufacturing advanced scientific instrumentation. The new team will receive assistance and guidance from experienced developers with a proven track record in developing instrumentation deployed in all reaches of the ocean. You will work in an office of energetic, technically proficient engineers and scientists, passionately helping each other excel every day. We directly serve customers such as government scientists, engineers in the energy sector, and uniformed technical experts in our military. We are a small office with huge reach and you will always feel like part of the action!

The Project

GPS does not work underwater so alternative methods are required in order to find your underwater location. These methods require the inclusion of multiple acceleration and orientation sensors plus a Doppler Velocity Log (DVL), one of Nortek's core products. The team will utilize the best available sensor technology to build complete navigation and autonomy solutions for use on subsea vehicles such as AUVs and ROVs.

The Navigation System Engineer will focus on the development of algorithms that fuse all available sensor data and generates the best possible estimate of position. The sensors are described by their statistical properties and the challenge is to optimize the system by using filters and integration methods that takes advantage of all sensors, taking into account noise characteristics and bias. Your work will be carried out using mathematical modelling and you will become an expert in the relationship between sensor characteristics and the effect on autonomous underwater navigation. The result of your effort will be programmed into our hardware platform and deployed in complete navigation products for use on underwater robots.



Requirements

- A Masters or PhD in Mathematics, Physics, Electrical Engineering, or similar
- Experience with mathematical modelling and forecasting with sensor inputs
- Experience using mathematical modelling tools such as Matlab or similar
- Experience solving problems related to guidance, navigation and control of vehicles
- Must be authorized to work in the USA

Benefits

Professional Development

- Team work with clear goals and independent decision making
- See your effort generate distinct products promoted by a worldwide sales organization
- Collaborative development opportunities with many of the leading subsea vehicle manufacturers in the world
- Work under the guidance of experienced hardware and firmware development engineers
- Product training, extent depending on experience level, at company headquarters in Oslo, Norway
- Yearly Nortek global engineering meetings hosted in Oslo or other subsidiary location

Employee benefits include

- Health, vision, and dental insurance with 100% premium coverage for employee
- 401k with 5% matching contributions
- Paid vacation, holidays, and sick leave

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