

Research Engineer - Signal Processing and Algorithms

The company

VitalWear is an early stage startup company based in Eindhoven, developing textiles and clothing with integrated photonic sensing technology for non-invasive medical applications. Our vision is to become a leading provider of medical grade wearable sensors that can safely, continuously, and comfortably measure key parameters of patients. Our first application is aimed at the early detection and more effective treatment of pressure ulcers, a global healthcare problem which is growing due to the aging population.

VitalWear is currently recruiting for several key roles to build its technical team and to develop its first functional prototype.

Why join us

Are you seeking a challenge within a dynamic environment and aiming to apply your skills to make a positive impact on society? Do you aspire to be part of an ambitious team dedicated to pushing the boundaries of technology, poised to revolutionize non-invasive healthcare? Are you excited about bridging the realms of hardware and software, with a fervent passion for algorithms and a knack for experimental design?

If so, this opportunity might be tailor-made for you!

Role and responsibilities

As a Research Engineer you will be a member of our R&D team and you will focus on the design, development, and validation of algorithms for modelling of real-time signals collected by our hardware sensors. In particular, you will be responsible for:

- Developing algorithms for processing of measured data into physical quantities used in real time processing
- Qualifying algorithms with experiments under laboratory or realistic conditions
- Developing test code for regression and progression
- Maintaining and extending in-house code base
- Reporting and documenting findings to internal team
- Engaging in problem solving and contributing with out-of-the-box solutions to root-cause-analyses

Cross-functional contributions:

- Contribute to high quality reports such as patents or publications
- Expand laboratory infrastructure and capabilities
- Extend automation capabilities in laboratories
- Competence sharing & mentoring of newer team-members

We are looking for a person who has/is

- PhD, PDEng or Master degree in Physics, Electrical Engineering, Mechanical Engineering or similar discipline
- Excellent skills in Python, C/C++ or MATLAB programming
- Experience in a similar position will be considered a plus
- Experience with Fiber Optics or Photonics will be considered a plus
- Experience with modelling of biological signals will be considered a plus
- Strong verbal/written communicating skills in English
- Fluency in Dutch will be considered a plus
- Solid analytical skills
- Hands-on mentality
- Innovative, enthusiastic, driven and a self-starter

We offer

- Fast growth and personal development options
- Opportunity to shape tomorrow's healthcare as part of a small team
- A warm, open, dynamic and friendly startup environment
- Possibility to benefit from company's success via Stock Appreciation Rights.

Join us at VitalWear as we embark on a journey to transform healthcare through innovation and technology. Make your mark and contribute to a brighter, healthier tomorrow. Apply now to be a part of our pioneering team!