



Assistant or Associate Professor Signal Processing and Control Methods for Personalised Health

Apply Now

Challenge: Harnessing massive amounts of health data for analysis and interpretation.

Change: Combining conventional, data-driven and AI-based methods.

Impact: Drive the development of technologies for personalised health.

Job description

Personalised health care will enrich people's lives. To get there, we need to gain an in-depth understanding of massive amounts of health data. As an Assistant or Associate Professor at the [Delft Center for Systems and Control](#) (DCSC) you will conduct fundamental research geared to processing, analysing, mining and interpreting data. Working closely with medical experts and hospitals, you'll be designing new algorithms, models and methods which will have a profound impact on anything from diagnostics, predictive health care and control of biological systems to the development of emerging medical apps and instruments.

You will focus on the development of new data-driven modelling, signal processing, and control methods for AI-driven decision making to improve personalised health care. Based on your vision, you will write project proposals and attract funding from the Dutch Research Council (NWO), EU institutes and the health care industry. You will also be building your team of PhD candidates whom you will supervise and coach to completion. To expand your network, you will play an active role in relevant communities and organisations, such as [Convergence Health & Technology](#). Education too is a crucial part of your role, as you will teach Master students and supervise their thesis projects.

At DCSC you'll be joining our highly motivated, international 25-strong team of professors and scientists, and our growing group of postdocs and PhD candidates. We offer you an open, friendly and highly supportive environment, in which you'll get all the training and coaching you need to develop your academic career. We do not distinguish between hierarchical levels and have a strong collaborative culture, in which we interact on a daily basis. Sharing a drive to strengthen the position of DCSC as a whole, we combine and harness TU Delft's expertise in systems and control.

Requirements

You thrive on taking the lead in developing meaningful research geared to analysing data in a medical context. Leveraging your communication and networking skills, you convince stakeholders of your proposals and work towards tangible team results. Looking at the stakeholders, prior experience of working with medical professionals will be useful. You also enjoy teaching, mentoring and interacting with students, while you yourself will get all the support you need to develop your own skills and expertise.

You also have:

- A PhD in Systems and Control, Electrical Engineering, Physics, Applied Mathematics, Computer Science or another relevant engineering subject.
- Experience of, or a drive to learn all about medical AI applications and algorithm prototyping.
- A good command of written and spoken English, as you'll be working in an international academic and medical community.

Conditions of employment

Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities (salary indication for Assistant Professor: € 3.974 - € 6.181) (salary indication for Associate Professor € 5.506 - € 7.362).

In case of an Assistant Professor appointment, a tenure-track position is offered for six years. Section leader, department leaders and you will agree upon expected performance and (soft) skills. You will receive formal feedback on performance and skills during annual assessment meetings and the mid-term evaluation. If the performance and skills are evaluated positively at the end of the tenure track, you will be appointed in a permanent Assistant Professor position. We expect that you have the potential to grow towards an Associate Professor and/or Full Professor role in the future. For more information about the tenure track and the personal development programme, please visit www.tudelft.nl/tenuretrack.

Inspiring, excellent education is our central aim. We expect you to obtain a University Teaching Qualification (UTQ) within three years if you have less than five years of teaching experience. This is provided by the TU Delft UTQ programme. For candidates at the Associate Professor level, we offer an initial temporary position with the prospect of a permanent contract. The duration of the temporary position is a maximum of 1 year. After a positive performance assessment, you will be employed in a permanent Associate Professor position.

TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. For international applicants we offer the Coming to Delft Service and for partners the Dual Career Services to assist you with the relocation. An International Children's Centre offers childcare and there is an international primary school. TU Delft sets high standards for the English competency of the teaching staff. The TU Delft offers training to improve English competency. If you do not speak Dutch, we offer courses to learn the Dutch language.

TU Delft (Delft University of Technology)

Delft University of Technology is built on strong foundations. As creators of the world-famous Dutch waterworks and pioneers in biotech, TU Delft is a top international university combining science, engineering and design. It delivers world class results in education, research and innovation to address challenges in the areas of energy, climate, mobility, health and digital society. For generations, our engineers have proven to be entrepreneurial problem-solvers, both in business and in a social context.

At TU Delft we embrace diversity as one of our core [values](#) and we actively [engage](#) to be a university where you feel at home and can flourish. We value different perspectives and qualities. We believe this makes our work more innovative, the TU Delft community more vibrant and the world more just. Together, we imagine, invent and create solutions using technology to have a positive impact on a global scale. That is why we invite you to apply. Your application will receive fair consideration.

Challenge. Change. Impact!

Faculty Mechanical, Maritime and Materials Engineering

The Faculty of 3mE carries out pioneering research, leading to new fundamental insights and challenging applications in the field of mechanical engineering. From large-scale energy storage, medical instruments, control technology and robotics to smart materials, nanoscale structures and autonomous ships. The foundations and results of this research are reflected in outstanding, contemporary education, inspiring students and PhD candidates to become socially engaged and responsible engineers and scientists. The faculty of 3mE is a dynamic and innovative faculty with an international scope and high-tech lab facilities. Research and education focus on the design, manufacture, application and modification of products, materials, processes and mechanical devices, contributing to the development and growth of a sustainable society, as well as prosperity and welfare.

Click [here](#) to go to the website of the Faculty of Mechanical, Maritime and Materials Engineering. Do you want to experience working at our faculty? These [videos](#) will introduce you to some of our researchers and their work.

Additional information

If you would like more information about this position, please contact Prof. Dr. Michel Verhaegen MSc, email: m.verhaegen@tudelft.nl.

If you would like more information about the selection procedure, please contact Ms Irina Bruckner, HR advisor, email recruitment-3mE@tudelft.nl.

Application procedure

Are you interested in this vacancy? Please apply via the application button and add the following documents to your application:

1. Motivation letter.
2. Detailed CV.
3. Recent teaching evaluations (if available).
4. Teaching statement.
5. Research statement.
6. Two research papers (published or unpublished).
7. Names and contact information of at least three relevant references.

We will not process applications sent by email and/or post.

Evaluation of candidates will start immediately until the position is filled, with a closing date of 15 February 2023.

After the first selection, the process foresees (video) interviews and site visits for the successful candidates. The interviews at TU Delft will take place in spring 2023.

A pre-employment screening can be part of the selection procedure.

Acquisition in response to this vacancy is not appreciated.

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