

12 Netherlands Institute on Research on ICT

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The 4TU.NIRICT research centre concentrates on bringing together, positioning and prioritising all aspects of ICT research. ICT is a very broad field, in which 4TU.NIRICT focuses on the interface between electrical engineering and computer science. This is why NIRICT encourages and facilitates interaction and collaboration in these areas, as well as in other disciplines. NIRICT aims to unite the ICT community and recognises and values the role of young scientists in the institutions.

2020 brought many challenges, as well as fresh opportunities. During the year, management considered the options for the future. The result is a new vision and mission, together with a number of exciting ambitions for the years ahead.

Vision and mission

Vision: Creating collaboration in the 4TU ICT community by bringing ICT research disciplines together, thereby ensuring that Dutch society and industry can thrive.

The mission of NIRICT is to tackle ICT challenges in the context of a connected world. 4TU.NIRICT helps promote ICT in engineering and technological development, better work methods in these areas, and innovation in the teaching of ICT. We achieve this by bringing together relevant stakeholders such as ICT researchers, teachers, and people from the professional field for activities aimed at community building.

Connecting electrical engineering and computer science

ICT is a very broad field, in which 4TU.NIRICT focuses on the interface between electrical engineering and computer science. In order to exploit the full potential of ICT for society and the business sector, it is important to bring ICT researchers from the fields of electrical engineering and computer science together and to strengthen the community. NIRICT has been doing this since 2018 - through the call for community funding, for example. In 2020, the right balance between electrical engineering and computer science as a requirement for funding was added, in addition to working partnerships between multiple universities. Four projects were approved in the reporting year. They focus on intelligent long-range Wi-Fi, hardware acceleration, self-sustainable computing, and multi-paradigm modelling and management of software-intensive systems.

"The new generation of ICT specialists is more diverse in every respect.

They are more international, some are returning to university from industry, and they are also trying to make their mark outside the traditional scientific paths."

Cynthia Liem - chair, ICTng in [interview with 4TU](#)

Helping the next generation

As in previous years, helping the next generation was high on NIRICT's list of priorities. They are the future and it is important to be aware of their wishes, their needs, and their fears, and what obstacles they are likely to come up against. To that end, a survey was sent out in the summer of 2020, in collaboration with *ICTng* (a NIRICT initiative), on the subject of perceptions of academic leadership among the Dutch academic ICT community. A total of 121 people completed the survey, which produced valuable information for NIRICT about universal problems, challenges and wishes. The annual NIRICT Community Day (an online version this year) was also mainly about the next generation and the results of the survey. The participants were divided into theme-based groups and some very useful discussions took place.

DEI fund

NIRICT aims to create a united ICT community that can help tackle the social challenges facing Dutch society. That is why, in June, NIRICT opened the [DEI fund](#) (diversity, equity, inclusion), aimed at creating these values in the community. 4TU.NIRICT uses the DEI fund to support projects that promote a culture and environment in which all members of the 4TU.NIRICT community can take part and develop their talents to the full. Three projects were approved in 2020. The first is aimed at best practices in the area of gender and nationality composition of student teams. The second project involves supporting participation of researchers from under-represented groups in the Lorentz 'Beyond the Mobile-Cloud Computing Paradigm' workshop. The third emphasises the inspiring work of women in computer science.

Agenda for 2021

NIRICT is currently working on an ambitious plan to give a boost to the new generation of ICT researchers as well as to ICT research itself. It is therefore seeking to use 2021 primarily for raising the profile of its new vision, mission, plans and ambitions. The call for community and DEI funding will continue, as will the ICT.OPEN partnership. The results of the survey of the new generation of ICT scientists will be used to improve their professional well-being. To increase their mutual awareness, a member of ICTng will be joining the NIRICT board.