CLUSTER 4
HORIZON
EUROPE

NTNU DIGITAL IN EUROPE: LIST OF CALLS WITH THEIR RESPECTIVE INTERESTED NTNU RESEARCHERS

PROPOSED BY: NTNU BRUSSELS OFFICE, NTNU DIGITAL & IE FACULTY
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Dear Reader,

Are you looking for the best researchers with whom to collaborate on Horizon Europe cluster 4 bids? Then, read on.

We have matched our researchers to the upcoming Horizon Europe calls, based on both their expertise and the industry relations they can bring to the bid.

As the largest university in Norway - NTNU: the Norwegian University of Science and Technology - we can be a powerful partner and collaborator. With 240 signed projects and € 133 million in funding from Horizon 2020, we have currently achieved the University’ set targets for it.

And we are setting even more ambitious targets, for Horizon Europe, making it one of the centerpieces of our international strategy.

This document is one of six prospectuses that outline areas of expertise for - and of interest to - NTNU researchers, for each of the upcoming six clusters of Horizon Europe.

They are living documents. Even if you do not find an exact match, our research community would be thrilled to open a collaborative dialogue with you. Just ping a message to one of our institutional contact points, like NTNU’s Brussels Office.

Together, we can create true “knowledge for a better world”.

Tor Grande
Pro-rector of Research
Knowledge provides people with opportunities and influence, as well as a foundation for making wise choices. Knowledge inspires and challenges. It changes attitudes, mindsets, and how we perceive the world around us. Informed debate strengthens our democracy. NTNU’s activities should benefit society as a whole and society can trust that our findings comply with best scientific practice.

Knowledge and technology development create opportunities for increasing sustainable value creation and finding answers to major challenges. Through the United Nations, the world has agreed on 17 Sustainable Development Goals. NTNU will contribute actively towards achieving the Sustainable Development Goals.

**NTNU’s strength is our competence in science and technology combined with academic breadth and interdisciplinarity.**
NTNU is a university with an international focus, with headquarters in Trondheim and campuses in Ålesund and Gjøvik. NTNU has a main profile in science and technology, a variety of programmes of professional study, and great academic breadth, including medicine, architecture, and entrepreneurship.

**FACTS**

<table>
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<th>NOK 9,4 billion</th>
<th>41 971</th>
<th>7401</th>
<th>406</th>
</tr>
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<tr>
<td>annual budget</td>
<td>students</td>
<td>person-years</td>
<td>doctoral degrees</td>
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NTNU offers 371 programmes of study (2019), as well as continuing and further education. The university has the main responsibility for higher education in technology in Norway, and largest in engineering, teacher education and architecture. NTNU aims to be a national hub in programmes of professional study.

NTNU is the institution that is awarded most funding from the Research Council in Norway, as well as being granted with 240 signed projects and a total funding of €133 million from Horizon 2020 (and 11 more projects in the process of being signed). Moreover, NTNU is a host or partner for 46 major research centres (SFF, SFI, and FME), and has internal initiatives to develop and recruit top researchers.

Beyond its science and technology profile, NTNU covers a broad range of social science and humanities (SSH) disciplines including sociology, political science, education, psychology, economics, history, cultural sciences and the arts. Researchers from SSH disciplines have been successfully addressing societal issues and contributed to social innovation through participation in more than 30 H2020 projects, presenting NTNU as promising and strong partner in future European collaborations in all Global Challenge clusters under Horizon Europe.

From 2014-2023, NTNU has identified several strategic research areas and enabling technologies:
The NTNU Brussels Office represents NTNU in Brussels, provides strategic advice on European policies, promotes NTNU positions, manages or participates in strategic networks and initiatives in Brussels, and provides professional services to the NTNU community based on its Brussels presence.

The office represents both «the door to NTNU» for organizations that want to collaborate and create synergies with NTNU, and «the door to Europe» for colleagues active in or willing to enter the European Arena.

NTNU opened the doors of its Brussels Office in 2015 and today the staff consists of five people, Director Massimo Busuoli, one intern and two trainees, as well as an EU advisor which is stationed in Brussels for the Faculty of Information Technology and Electrical Engineering (IE).

The office activities and services include the following:

- Promotion and representation of NTNU in Brussels
- Positioning of NTNU in relevant Brussels-based initiatives and bodies
- Contribution to improve NTNU’s EU project portfolio
- Provide internship opportunities for NTNU employees and students
- Provision of logistic support and services in Brussels
NTNU Digital

NTNU Digital is a strategic initiative created to increase the understanding, use and development of digital technology to solve complex issues across research disciplines. The focus areas of NTNU Digital are Artificial Intelligence, Autonomous Systems, Cyber Security and Computational Technology. The core research areas can be shared across diverse applications, and the ambition is to achieve a beneficial cross-fertilization by bringing together researchers from different application areas but with commonalities in method and theory.

NTNU Digital provides the following resources across all the faculties at NTNU:

- Long-term positioning and participation in European Networks and Alliances
- Coordination, guidance and review of large, strategically important applications submitted for the European Framework Programmes and the national funding schemes
- Identification of new collaboration opportunities and overview of ongoing, relevant projects
- Internal platform to meet, obtain and share info across NTNU related to enabling digital technologies
- Promotion of NTNU research excellence and capacities within digital technologies in front of local, national, and international research and innovation arenas
NTNU Digital: Success stories

These are some examples of NTNU Digital success stories.

Conceptual architecture and coordination of the **MSCA COFUND PERSEUS** proposal which aims to educate top-level researchers contributing to solve societal challenges within the areas of energy, healthcare, manufacturing, mobility, and ocean-based technology, through the use of digital technologies.

Strategic guidance and review of long-term strategic and prestigious research and innovation proposals submitted for the funding to the Research Council of Norway. These projects have been awarded: **SFI Autoship** - Autonomous ships for safe and sustainable operations, **NorwAI** - Norwegian Research Centre for AI Innovation, **NORCICS** - Norwegian Centre for Cybersecurity in Critical Sectors and **CGF** - Centre for Geophysical Forecasting.
The Faculty of Information Technology and Electrical Engineering (IE) has more than 65 percent of the Norwegian university education and research within our disciplines. We offer bachelor, master, and PhD degrees in our areas of expertise. We have the largest number of students at Master and PhD levels in Norway within our disciplines.

The research at the Faculty of Information Technology and Electrical Engineering addresses challenges ranging from basic research in mathematics, computer science, cybernetics, nano and microelectronics, to global research demands within energy, transport, health and welfare, robust and secure ICT services, cyber security and marine and arctic operations.

The different research fields are organized along the lines of 11 strategic research areas:

- Artificial Intelligence
- Autonomous Systems
- Cyber Security
- Small Satellite Lab
- Mathematics in Technology
- Data Science
- Internet of Things
- Energy Efficient Computing Systems
- Digital Twins
- Digital Enterprise
- Digital Electric Energy
Horizon 2020

IE Faculty participation

65

RESEARCH PROJECTS

Ranging from excellence projects within basic research (ERC), doctoral and postdoctoral training (MSCA) to collaborative R&I projects with higher TRL levels together with a number of European partners within research, public sector and industry.
Faculty of Information Technology and Electrical Engineering

We have great influence on and responsibility for new information-based industrial developments and developments within other areas of society which apply information and communication technology. Both our research and education are at a high international level.

Our PhD programs are popular for national and international students, either at a program within our faculty:

- Computer Science
- Electric Power Engineering
- Electronics and Telecommunication
- Engineering Cybernetics
- Information Security and Communication Technology
- Mathematical Sciences

Or through a cross-disciplinary program such as Medical Technology

We are also partners in two National research schools:

- Nanotechnology for Microsystems
- Computer and Information Security
COLLABORATING WITH NTNU

As the largest Norwegian university with high multidisciplinary nature, NTNU offers a wide range of expertise and competences. Specific mapping of available researchers willing to collaborate on Horizon Europe have been performed for all clusters, producing documents similar to this brochure. All the brochures are available through the NTNU Brussels Office.

Make sure you have the latest version available by downloading it from this website.

Should you be interested to explore collaboration opportunities in areas not present in any of these brochures, you can get in touch with the institutional entry points of the university

ENTRY POINTS

NTNU Brussels Office

NTNU Digital

Local contact point digital technologies Horizon Europe: Vilija Balionyte-Merle - NTNU Digital coordinator

Faculty EU advisors
- AD - Fakultet for arkitektur og design – Tone Woie Alstadheim og Srutarshi Pradhan
- HF - Det humanistiske fakultet – Chamila Thushari Attanapola og Thomas Aarnseth
- IE - Fakultet for informasjonsteknologi og elektroteknikk – Nathalie Søyseth
- IV - Fakultet for ingeniørvitenskap – Ingunn Syrstad Bøgeberg og Miriam K. Khider
- MH - Fakultet for medisin og helsevitenskap – Emma Louise Walton og Morgane Colleau
- NV - Fakultet for naturvitenskap – Thais Mothe-Diniz og Eugen Gravningen Sørmo
- SU - Fakultet for samfunns- og utdanningsvitenskap – Bård Li og Jens Rohloff
- ØK - Faculty of Economics and Management – Gunnar Bendheim
- VM - NTNU University Museum – Solveig Bakken
- NTNU in Gjøvik – Anne Hilde Ruen Nymoen
- NTNU in Ålesund – Kirsti Brekke
Destination 1: Climate neutral, circular and digitised production

Here you can find potential NTNU researchers that are interested in collaborations on destination 1.

The following pages are sorted into the calls for the destination presented in the work programme for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
HORIZON-CL4-2022-TWIN-TRANSITION-01-04 Excellence in distributed control and modular manufacturing (RIA)

HORIZON-CL4-2022-TWIN-TRANSITION-01-05: Intelligent work piece handling in a full production line (RIA)

HORIZON-CL4-2022-TWIN-TRANSITION-01-06 ICT Innovation for Manufacturing Sustainability in SMEs (I4MS2) (IA)

HORIZON-CL4-2022-TWIN-TRANSITION-01-07 Digital tools to support the engineering of a Circular Economy (RIA)

HORIZON-CL4-2022-TWIN-TRANSITION-01-09 Demonstrate the use of Digital Logbook for buildings (IA)

HORIZON-CL4-2022-TWIN-TRANSITION-01-15 New electrochemical conversion routes for the production of chemicals and materials in process industries (RIA)
Morten Hovd

DEPARTMENT OF ENGINEERING CYBERNETICS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
morten.hovd@itk.ntnu.no
+47 91897189

Expertise
Control systems.

Relevant projects
CONNECT (COST)
TEMPO (ITN)
Giöele Barabucci

**Department of Design**  
**Faculty of Architecture and Design**

**Contact information**  
giöele.barabucci@ntnu.no  
+47 73592014

**Expertise**  
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

**Relevant projects**  
EU: rurALLURE CSA, DiXiT ITN.

**Relevant Industry Contacts**  
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Jingyue Li

**Department of Computer Science**  
**Faculty of Information Technology and Electrical Engineering**

**Contact information**  
jingyue.li@ntnu.no  
+47 91897446

**Expertise**  
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

**Relevant projects**  
(PaaSforChain) (2020-2023) (PI)  
(SmartRehab) (2020-2021) (PI)  
CyberSmart  
IPIT  
CIRCit (2017-2020) (Work Package leader)  
SAREPTA (2017-2020) (Key Scientist)  
SafeCop (2016-2019) (Key Scientist)  
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)

**Relevant Industry Contacts**  
DNV, SINTEF, Equinor, NGI, Kantega

Muhammad Sajjad

**Department of Computer Science**  
**Faculty of Information Technology and Electrical Engineering**

**Contact information**  
muhammad.sajjad@ntnu.no  
+47 61135374

**Expertise**  
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.  
Computer vision, Machine Learning and Deeplearning concepts can be incorporated.

**Relevant projects**  
1. ALAMEDA Project (Continue)  
2. Smart Neck Collar for Livestock  
3. Generic and Feature-based opinion summarizer for online product  
5. Road Safety for Kids based on Virtual Reality Interaction Physical Space
Quoc Anh Tran
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING

Contact information
quoc.a.tran@ntnu.no
+47 41356941

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Expertise
(1) Computational and Numerical analysis in high-performance computing.
(2) Machine learning.
(3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant projects
experience in EU projects
MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
HORIZON-CL4-2022-TWIN-TRANSITION-01-07: DIGITAL TOOLS TO SUPPORT THE ENGINEERING OF A CIRCULAR ECONOMY (RIA)

Gioele Barabucci

DEPARTMENT OF DESIGN
FACULTY OF ARCHITECTURE AND DESIGN

Expertise
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

Relevant projects
EU: rurALLURE CSA, DiXiT ITN.

Contact information
gioele.barabucci@ntnu.no
+47 73592014

Relevant Industry
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Jingyue Li

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
CyberSmart
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)

Contact information
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+47 91897446

Relevant Industry
Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Kerstin Bach

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Expertise
Artificial Intelligence, Decision Support Systems, Case-Based Reasoning, eHealth, mHealth, Machine Learning.

Relevant projects
selfBACK
AI4EU
Back-Up

Contact information
kerstin.bach@ntnu.no

Relevant Industry
Contacts
Telecommunications, energy, financial services, manufacturing
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Contact information
quoc.a.tran@ntnu.no
+47 41356941

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Expertise
(1) Computational and Numerical analysis in high-performance computing.
(2) Machine learning.
(3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant projects
experience in EU projects
MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
Gioele Barabucci

DEPARTMENT OF DESIGN
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Contact information
gioele.barabucci@ntnu.no
+47 73592014

Expertise
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

Relevant Industry Contacts
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Relevant projects
EU: rurALLURE CSA, DiXiT ITN.
Morten Hovd

DEPARTMENT OF ENGINEERING CYBERNETICS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
morten.hovd@itk.ntnu.no
+47 91897189

Expertise
Control systems.

Relevant projects
CONNECT (COST)
TEMPO (ITN)
Here you can find potential NTNU researchers that are interested in collaborations on destination 2.

The following pages are sorted into the calls for the destination presented in the draft for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
HORIZON-CL4-2022-RESILIENCE-01-02  Monitoring and supervising system for exploration and future exploitation activities in the deep sea (RIA)

HORIZON-CL4-2022-RESILIENCE-01-05 Technological solutions for tracking raw material flows in complex supply chains (RIA)

HORIZON-CL4-2022-RESILIENCE-01-08 Earth observation technologies for the mining life cycle in support of EU autonomy and transition to a climate-neutral economy (RIA)

HORIZON-CL4-2022-RESILIENCE-01-25 Optimised Industrial Systems and Lines through digitalisation (IA)

HORIZON-CL4-2022-RESILIENCE-01-21 Leveraging standardisation in Digital Technologies (CSA)
HORIZON-CL4-2022-RESILIENCE-01-02: MONITORING AND SUPERVISING SYSTEM FOR EXPLORATION AND FUTURE EXPLOITATION ACTIVITIES IN THE DEEP SEA (RIA)

John Potter
DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
John.R.Potter@ntnu.no
+47 41371394

Relevant Industry Contacts
Maritime Industries

Expertise

Relevant projects
MORPH, SUNSET, ROMANIS, UNET
Quoc Anh Tran
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING

Contact information
quoc.a.tran@ntnu.no
+47 41356941

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Expertise
(1) Computational and Numerical analysis in high-performance computing.
(2) Machine learning.
(3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant projects
experience in EU projects
MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
HORIZON-CL4-2022-RESILIENCE-01-08: EARTH OBSERVATION TECHNOLOGIES FOR THE MINING LIFE CYCLE IN SUPPORT OF EU AUTONOMY AND TRANSITION TO A CLIMATE-NEUTRAL ECONOMY (RIA)

John Potter
DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
John.R.Potter@ntnu.no
+47 41371394

Relevant Industry Contacts
Maritime Industries

Expertise

Relevant projects
MORPH, SUNSET, ROMANIS, UNET

Quoc Anh Tran
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING

Contact information
quoc.a.tran@ntnu.no
+47 41356941

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Expertise
(1) Computational and Numerical analysis in high-performance computing.
(2) Machine learning.
(3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant projects
experience in EU projects
MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
Morten Hovd

DEPARTMENT OF ENGINEERING CYBERNETICS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
morten.hovd@itk.ntnu.no
+47 91897189

Expertise
Control systems.

Relevant projects
CONNECT (COST)
TEMPO (ITN)
Contact information
jingyue.li@ntnu.no
+47 91897446

Relevant Industry Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
CyberSmart
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)
Here you can find potential NTNU researchers that are interested in collaborations on destination 3.

The following pages are sorted into the calls for the destination presented in the draft for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
DESTINATION 3 - CALLS

Click on the call to be directed to its page

HORIZON-CL4-2022-DATA-01-03 Programming tools for decentralised intelligence and swarms (RIA)

HORIZON-CL4-2022-DATA-01-04 Technologies and solutions for data trading, monetizing, exchange and interoperability (IA)

HORIZON-CL4-2022-DATA-01-01 Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way (RIA)

HORIZON-CL4-2022-DATA-01-02 Cognitive Cloud: AI-enabled computing continuum from Cloud to Edge (RIA)

HORIZON-CL4-2022-DATA-01-03 Programming tools for decentralised intelligence and swarms (RIA)
Quoc Anh Tran

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING

Contact information
quoc.a.tran@ntnu.no
+47 41356941

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Expertise
(1) Computational and Numerical analysis in high-performance computing.
(2) Machine learning.
(3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant projects
experience in EU projects
MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
Giœle Barabucci

DEPARTMENT OF DESIGN
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Contact information
gioele.barabucci@ntnu.no
+47 73592014

Expertise
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

Relevant Industry Contacts
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Relevant projects
EU: rurALLURE CSA, DIXIT ITN.

Jiaxin Pan

DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
jiaxin.pan@ntnu.no
+47 46559629

Expertise
Cyber security, IT Security, Cryptography.

Jingyue Li

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
jingyue.li@ntnu.no
+47 91897446

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant Industry Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
CyberSmart
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)
Muhammad Sajjad

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Expertise
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.

Data science, IoT, data fusion and Deep learning.

Relevant projects
1. ALAMEDA Project (Continue)
2. Smart Neck Collar for Livestock
3. Generic and Feature-based opinion summarizer for online product
5. Road Safety for Kids based on Virtual Reality Interaction Physical Space

Contact information
muhammad.sajjad@ntnu.no
+47 61135374

Relevant Industry Contacts
NIBIO
Bob O'Hara
DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
bob.ohara@ntu.no
+47 91554416

Expertise
Statistics, particularly the development of hierarchical models for complex data structures in biology.

Edmund Brekke
DEPARTMENT OF ENGINEERING CYBERNETICS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
edmund.brekke@ntu.no
+47 92405873

Expertise
Sensor Fusion.

Relevant Industry Contacts
Active collaboration with maritime industri in the Centre for Research-Based Innovation SFI Autoship and related projects.

Relevant projects
Autosea - Sensor Fusion and Collision Avoidance for Autonomous Surface Vehicles.

Elena Celledoni
DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
elena.celledoni@ntu.no

Expertise
Mathematics, numerical methods, deep learning as optimal control and dynamical systems.

Relevant projects
MSCA IRSES (NTNU leading), MSCA RISE (NTNU leading), MSCA ITN (NTNU WP leader).

Relevant Industry Contacts
Collaboration with TechnipFMC for a Industrial PhD and as a partner in our ITN project. Collaboration with Mathworks UK, as industrial partner in the RISE project.
HORIZON-CL4-2022-DATA-01-01: METHODS FOR EXPLOITING DATA AND KNOWLEDGE FOR EXTREMELY PRECISE OUTCOMES (ANALYSIS, PREDICTION, DECISION SUPPORT), REDUCING COMPLEXITY AND PRESENTING INSIGHTS IN UNDERSTANDBALE WAY (RIA)

Gioele Barabucci
DEPARTMENT OF DESIGN
FACULTY OF ARCHITECTURE AND DESIGN

Contact information
gioele.barabucci@ntnu.no
+47 73592014

Expertise
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

Relevant projects
EU: rurALLURE CSA, DIXIT ITN.

Relevant Industry Contacts
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Hong Guo
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
homekuo@gmail.com

Expertise
Enterprise architecture, Business-IT alignment, Organizational alignment, Digital transformation planning, Modeling techniques (i.e., domain specific models, model driven development, and model quality).

Relevant projects
+CityxChange
(https://cityxchange.eu)

Relevant Industry Contacts
CEAA (Chinese Enterprise Architecture Association)
SME ERP
Intel, Microsoft, IBM and etc.

Ilangko Balasingham
DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
ilangko.balasingham@ntnu.no
+4793459022

Expertise
Signal processing including deep learning, Wireless communications (physical layer, ultra low power transmission), Backscatter wireless for high data rate communications, Nano scale communications (molecular and biocommunications), Wireless data and power transfer. Deep learning methods for real time prediction of complex events.

Relevant projects
Wireless Brain-Connect Interface to Machines (B-CRATOS)
Bio-NanoThings for Prediction and Prevention of Infectious Diseases (CLIPEUS)
Reliable Technologies and Models for Verified Wireless Body-Centric Transmission and Localization (ROVER)
Jingyue Li
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
jingyue.li@ntnu.no
+47 91897446

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021) (PI)
CyberSmart
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)

Kiran Raja
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
Kiran.raja@ntnu.no
+47 61135374

Expertise
Biometrics, Face recognition, Privacy, Attack Detection, Deep Learning, Medical Imaging.

Relevant projects
EU-FP7-INGRESS, EU-FP7-TURBINE, EU-H2020-SOTAMD, EU-H2020-iMARS

Milica Orlandic
DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUS MASSIVE
NFR MAROFF ADRASSO
Muhammad Sajjad

CONTACT INFORMATION
muhammad.sajjad@ntnu.no
+47 61135374

EXPERIENCE
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.
Data science, data fusion and Deep learning.

RELEVANT PROJECTS
1. ALAMEDA Project (Continue)
2. Smart Neck Collar for Livestock
3. Generic and Feature-based opinion summarizer for online product
5. Road Safety for Kids based on Virtual Reality Interaction Physical Space

Kerstin Bach

CONTACT INFORMATION
kerstin.bach@ntnu.no

EXPERIENCE
Artificial Intelligence, Decision Support Systems, Case-Based Reasoning, eHealth, mHealth, Machine Learning.

RELEVANT PROJECTS
selfBACK
AI4EU
Back-Up
Anne C. Elster

**DEPARTMENT OF COMPUTER SCIENCE**
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Expertise**
Tools and methods, including autotuning for parallel and distributed computing, including HPC & GPU computing.
HPC for AI.

**Relevant projects**
- EU FP 7 R&I Cloudlightning (WP leader for HPC), 2015-2018
- EU FP 7 MCSA PostDoc TICOH (Taming Irregular Computations on Heterogeneous Processors), 2017-2019
- Norwegian Center for Research-based Innovation, Center for Geophysical Forecasting (WP leader for HPC), 2020-2025

**Contact information**
- elster@ntnu.no
- +47 981 02 638

**Relevant Industry Contacts**
- Equinor, IBM, Intel, NVIDIA ++

John Potter

**DEPARTMENT OF ELECTRONIC SYSTEMS**
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Expertise**

**Relevant projects**
- MORPH, SUNSET, ROMANIS, UNET

**Contact information**
- John.R.Potter@ntnu.no
- +47 41371394

**Relevant Industry Contacts**
- Maritime Industries

Muhammad Sajjad

**DEPARTMENT OF COMPUTER SCIENCE**
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Expertise**
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.
Edge computing, fog computing, cloud computing and AI.

**Relevant projects**
- 1. ALAMEDA Project (Continue)
- 2. Smart Neck Collar for Livestock
- 3. Generic and Feature-based opinion summarizer for online product
- 5. Road Safety for Kids based on Virtual Reality Interaction Physical Space

**Contact information**
- muhammad.sajjad@ntnu.no
- +47 61135374

**Relevant Industry Contacts**
- NIBIO
Per Gunnar Kjeldsberg

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
pgk@ntnu.no
+47 7359 4405

Relevant Industry Contacts
Norway has a very strong industrial cluster in the field of microelectronics with which we cooperate closely. Examples are Nordic Semiconductor, Silicon Labs, ARM Norway, Microchip.

Expertise
Energy efficient embedded heterogeneous multi-processor systems, with a focus on Internet of Things, multi-media, and digital signal processing applications.

Relevant projects
Runtime Exploitation of Application Dynamism for Energy-efficient eXascale computing (www.readex.eu)
Towards Ubiquitous Low-power Image Processing Platforms (www.tulipp.eu)
Anne C. Elster

**DEPARTMENT OF COMPUTER SCIENCE**  
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Expertise**  
Tools and methods, including autotuning for parallel and distributed computing, including HPC & GPU computing.  
HPC for AI.

**Relevant projects**  
- EU FP 7 R&I Cloudlightning (WP leader for HPC), 2015-2018  
- EU FP 7 MCSA PostDoc TICOH (Taming Irregular Computations on Heterogenous Processors), 2017-2019  
- Norwegian Center for Research-based Innovation, Center for Geophysical Forecasting (WP leader for HPC), 2020-2025

**Contact information**  
elster@ntnu.no  
+47 981 02 638

**Relevant Industry Contacts**  
Equinor, IBM, Intel, NVIDIA ++

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Gioele Barabucci

**DEPARTMENT OF DESIGN**  
**FACULTY OF ARCHITECTURE AND DESIGN**

**Expertise**  
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

**Relevant projects**  
- EU: rurALLURE CSA, DiXiT ITN.

**Contact information**  
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+47 73592014

**Relevant Industry Contacts**  
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

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John Potter

**DEPARTMENT OF ELECTRONIC SYSTEMS**  
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Expertise**  

**Relevant projects**  
- MORPH, SUNSET, ROMANIS, UNET

**Contact information**  
John.R.Potter@ntnu.no  
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**Relevant Industry Contacts**  
Maritime Industries
Kerstin Bach

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
kerstin.bach@ntnu.no

Expertise
Artificial Intelligence, Decision Support Systems, Case-Based Reasoning, eHealth, mHealth, Machine Learning.

Relevant projects
selfBACK
AI4EU
Back-Up

Relevant Industry Contacts
Telecommunications, energy, financial services, manufacturing
ASSOCIATED PROFESSORS

Destination 4: Digital and emerging technologies for competitiveness and fit for the green deal

Here you can find potential NTNU researchers that are interested in collaborations on destination 4.

The following pages are sorted into the calls for the destination presented in the draft for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
HORIZON-CL4-2022-DIGITAL-EMERGING-01-26 Open source for cloud-based services (RIA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-03 Advanced multi-sensing systems (RIA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-05 AI, Data and Robotics for Industry optimisation (including production and services) (IA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-06 Pushing the limit of physical intelligence and performance (RIA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-07 Increased robotics capabilities demonstrated in key sectors (IA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-10 Strengthening the quantum software ecosystem for quantum computing platforms (RIA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-14 Specific Grant Agreement for supporting open testing and experimentation for quantum technologies in Europe (SGA)
Jingyue Li
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FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
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+47 91897446

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
CyberSmart
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)

Relevant Industry Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Kerstin Bach
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
kerstin.bach@ntnu.no

Expertise
Artificial Intelligence, Decision Support Systems, Case-Based Reasoning, eHealth, mHealth, Machine Learning.

Relevant projects
selfBACK
AI4EU
Back-Up

Relevant Industry Contacts
Telecommunications, energy, financial services, manufacturing
John Potter
DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
john.r.potter@ntnu.no
+47 41371394

Expertise

Relevant projects
MORPH, SUNSET, ROMANIS, UNET

Relevant Industry Contacts
Maritime Industries

Milica Orlandic
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FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO

Relevant Industry Contacts
space, electronics
Kiran Raja
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
Kiran.raja@ntnu.no
+47 61135374

Expertise
Biometrics, Face recognition, Privacy, Attack Detection, Deep Learning, Medical Imaging.

Relevant projects
EU-FP7-INGRESS, EU-FP7-TURBINE, EU-H2020-SOTAMD, EU-H2020-iMARS

Relevant Industry Contacts
SINTEF

Muhammad Sajjad
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
muhammad.sajjad@ntnu.no
+47 61135374

Expertise
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.
Computer vision, IoT and Deep learning.

Relevant projects
1. ALAMEDA Project (Continue)
2. Smart Neck Collar for Livestock
3. Generic and Feature-based opinion summarizer for online product
5. Road Safety for Kids based on Virtual Reality Interaction Physical Space

Relevant Industry Contacts
NIBIO
Snorre Aunet

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
snorre.aunet@ntnu.no
+47 73594316

Relevant Industry Contacts
Most microelectronics companies within Norway - some norwegian, but mostly foreign companies having branches in Norway.

Expertise
Ultra low power / low energy CMOS circuits, including subthreshold circuits and systems, mostly through university positions.

Long time experience within ultra low energy / low power circuits and systems, which is a key enabler of innovations for general computing systems.

Relevant projects
Several R & D projects while working in industry, or in cooperation with microelectronics companies, as well as academic projects supported by the Norwegian Research Council, EU or the European Space Agency, through almost 3 decades.
Edmund Brekke

**DEPARTMENT OF ENGINEERING CYBERNETICS**
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Contact information**
edmund.brekke@ntnu.no  
+47 92405873

**Expertise**
Sensor Fusion.

**Relevant projects**
Autosea - Sensor Fusion and Collision Avoidance for Autonomous Surface Vehicles.

**Relevant Industry Contacts**
Active collaboration with maritime industri in the Centre for Research-Based Innovation SFI Autoship and related projects.
HORIZON-CL4-2022-DIGITAL-EMERGING-01-10: STRENGTHENING THE QUANTUM SOFTWARE ECOSYSTEM FOR QUANTUM COMPUTING PLATFORMS (RIA)

Jingyue Li

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Contact information
jingyue.li@ntnu.no
+47 91897446

Relevant Industry Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
IPIT CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)
Jingyue Li
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Contact information
jingyue.li@ntnu.no
+47 91897446

Relevant Industry Contacts
DNV, SINTEF, Equinor, NGI, Kantega

Expertise
Blockchain technologies, software engineering, software security, Machine learning, system safety, and circular economy

Relevant projects
(PaaSforChain) (2020-2023) (PI)
(SmartRehab)(2020-2021)(PI)
IPIT
CIRCit (2017-2020) (Work Package leader)
SAREPTA (2017-2020) (Key Scientist)
SafeCop (2016-2019) (Key Scientist)
Model-Based Testing of Spacecraft Control Software (2011-2013) (Key Scientist)
ASSOCIATED PROFESSORS

Destination 5: Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data

Here you can find potential NTNU researchers that are interested in collaborations on destination 5.

The following pages are sorted into the calls for the destination presented in the draft for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
HORIZON-CL4-2022-SPACE-01-12 Technologies and generic building blocks for Electrical Propulsion

HORIZON-CL4-2022-SPACE-01-13 End-to-end Earth observation systems and associated services

HORIZON-CL4-2022-SPACE-01-41 Copernicus Marine Environment Monitoring Service evolution

HORIZON-CL4-2022-SPACE-01-43 Copernicus Land Monitoring Service evolution

HORIZON-CL4-2022-SPACE-01-72 Education and skills for the EU space sector

HORIZON-CL4-2022-SPACE-01-81 Space technologies for European non-dependence and competitiveness

HORIZON-CL4-2022-SPACE-02-54 Copernicus downstream applications and the European Data Economy

HORIZON-CL4-2022-SPACE-02-55 Large-scale Copernicus data uptake with AI and HPC

HORIZON-CL4-2022-SPACE-02-56 Designing space-based downstream applications with international partners
Dimosthenis Peftitsis

DEPARTMENT OF ELECTRIC POWER ENGINEERING
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Expertise
WBG (e.g. SiC, GaN) power converters design for high-power and MV applications, Adaptive gate driver designs for WBG devices, DC-breaker designs for MV and HVDC systems, High-performance power supplies for particle accelerators, Reliability assessment and lifetime modelling of high-power semiconductor devices, Reliability of SiC power semiconductors.

Contact information
dimosthenis.peftitsis@ntnu.no
+47 73594229
Milica Orlandic

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Expertise
- satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant Industry Contacts
space, electronics

Relevant projects
- NFR IKTPLUSS MASSIVE
- NFR MAROFF ADRASSO

Quoc Anh Tran

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
FACULTY OF ENGINEERING

Contact information
quoc.a.tran@ntnu.no
+47 41356941

Expertise
- (1) Computational and Numerical analysis in high-performance computing.
- (2) Machine learning.
- (3) Numerical methods for solid mechanics, fluid dynamics, fluid flow in porous media and thermal, mechanical, hydraulic coupling

Relevant Industry Contacts
Some companies related to renewable energy (wind and wave/tidal energy).

Relevant projects
- experience in EU projects
- MSCA-IF-2020 Submarine landslides and their impacts on offshore infrastructures
Milica Orlandic

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

**DEPARTMENT OF ELECTRONIC SYSTEMS**
**FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING**

**Contact information**
milica.orlandic@ntnu.no
+47 47713077

**Relevant Industry Contacts**
space, electronics

**Expertise**
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

**Relevant projects**
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

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Contact information
milica.orlandic@ntnu.no
+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

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Contact information
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+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

Department of Electronic Systems
Faculty of Information Technology and Electrical Engineering

Contact information
milica.orlandic@ntnu.no
+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Milica Orlandic

DEPARTMENT OF ELECTRONIC SYSTEMS
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
milica.orlandic@ntnu.no
+47 47713077

Relevant Industry Contacts
space, electronics

Expertise
satellite systems, hyperspectral imaging, remote sensing, onboard processing, embedded systems, high-performance computing

Relevant projects
NFR IKTPLUSS MASSIVE
NFR MAROFF ADRASSO
Here you can find potential NTNU researchers that are interested in collaborations on destination 6.

The following pages are sorted into the calls for the destination presented in the draft for cluster 4. To simplify your navigation among available expertises per topic, the list of topics have been made clickable.
HORIZON-CL4-2022-HUMAN-01-01 AI for human empowerment (RIA)

HORIZON-CL4-2022-HUMAN-01-02 European Network of AI Excellence Centres: Expanding the European AI lighthouse (RIA)

HORIZON-CL4-2022-HUMAN-01-03 Internet architecture and decentralised technologies (RIA)

HORIZON-CL4-2022-HUMAN-01-14 eXtended Reality Technologies (RIA)

HORIZON-CL4-2022-HUMAN-01-19 eXtended Reality Learning - Engage and Interact

HORIZON-CL4-SSA-SST-SD SST Networking, Security & Data sharing
Frank Lindseth
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Karin Laumann
DEPARTMENT OF PSYCHOLOGY
FACULTY OF SOCIAL AND EDUCATIONAL SCIENCES

Muhammad Sajjad
DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
frankl@ntnu.no

Karin Laumann
Contact information
Karin.laumann@ntnu.no

Expertise

Relevant projects

Contact information
muhammad.sajjad@ntnu.no
+47 61135374

Relevant Industry Contacts
NIBIO

Expertise
Image Reconstruction, Image and Video analysis, Information security, Big Data analysis.
AI enabled technologies

Relevant projects
1. ALAMEDA Project (Continue)
2. Smart Neck Collar for Livestock
3. Generic and Feature-based opinion summarizer for online product
5. Road Safety for Kids based on Virtual Reality Interaction Physical Space
Roberto Iacono

DEPARTMENT OF SOCIAL WORK
FACULTY OF SOCIAL AND EDUCATIONAL SCIENCES

Expertise

Contact information
roberto.iacono@ntnu.no
+47 90946148

Kerstin Bach

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Expertise
Artificial Intelligence, Decision Support Systems, Case-Based Reasoning, eHealth, mHealth, Machine Learning.

Relevant projects
selfBACK
AI4EU
Back-Up

Contact information
kerstin.bach@ntnu.no

Relevant Industry Contacts
Telecommunications, energy, financial services, manufacturing
Anne C. Elster

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
elster@ntnu.no
+47 981 02 638

Relevant Industry Contacts
Equinor, IBM, Intel, NVIDIA ++

Expertise
Tools and methods, including autotuning for parallel and distributed computing, including HPC & GPU computing.
HPC for AI.

Relevant projects
EU FP 7 R&I Cloudlightning (WP leader for HPC), 2015-2018
EU FP 7 MCSA PostDoc TICOH (Taming Irregular Computations on Heterogenous Processors), 2017-2019
Norwegian Center for Research-based Innovation, Center for Geophysical Forecasting (WP leader for HPC), 2020-2025
Gioele Barabucci
DEPARTMENT OF DESIGN
FACULTY OF ARCHITECTURE AND DESIGN

Contact information
gioele.barabucci@ntnu.no
+47 73592014

Relevant Industry Contacts
Connections to the world of open source businesses: Mozilla, xWiki, Qt, Red Hat.

Expertise
Information architecture; data modelling; Web technologies; Digital humanities; research data management; Human-Computer interaction; physical/graphical interfaces.

Relevant projects
EU: rurALLURE CSA, DIXIT ITN.
Frank Lindseth

DEPARTMENT OF COMPUTER SCIENCE
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Karin Laumann

DEPARTMENT OF PSYCHOLOGY
FACULTY OF SOCIAL AND EDUCATIONAL SCIENCES

Contact information
frankl@ntnu.no

Karin.laumann@ntnu.no

Expertise

Relevant projects
Anne C. Elster

Department of Computer Science
Faculty of Information Technology and Electrical Engineering

Contact information
elster@ntnu.no
+47 981 02 638

Expertise
Tools and methods, including autotuning for parallel and distributed computing, including HPC & GPU computing.
Parallel computing, GPU computing.

Relevant projects
EU FP 7 R&I Cloudlightning (WP leader for HPC), 2015-2018
EU FP 7 MCSA PostDoc TICOH (Taming Irregular Computations on Heterogenous Processors), 2017-2019
Norwegian Center for Research-based Innovation, Center for Geophysical Forecasting (WP leader for HPC), 2020-2025

Frank Lindseth

Department of Computer Science
Faculty of Information Technology and Electrical Engineering

Contact information
frankl@ntnu.no

Expertise

Relevant projects
Immersive Visual Technologies for Safety-critical Applications (ImmerSAFE).
Inter-organizational complexity. Petro-HRA.
Safety management system. ELAD/Implementation of new technology.

Karin Laumann

Department of Psychology
Faculty of Social and Educational Sciences

Contact information
Karin.laumann@ntnu.no

Expertise

Relevant projects
Immersive Visual Technologies for Safety-critical Applications (ImmerSAFE).
Inter-organizational complexity. Petro-HRA.
Safety management system. ELAD/Implementation of new technology.
Jiaxin Pan

DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Contact information
jiaxin.pan@ntnu.no
+47 46559629

Expertise
Cyber security, IT Security, Cryptography.
Knowledge for a better world

PROPOSED BY
NTNU BRUSSELS OFFICE
NTNU DIGITAL
IE FACULTY

PHOTOS
NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, IE FACULTY