AALBORG UNIVERSITET

HORIZON EUROPE 2026/2027 CALLS

CLUSTER 4 – DIGITAL, INDUSTRY AND SPACE

AAU Fundraising & Project Management Office

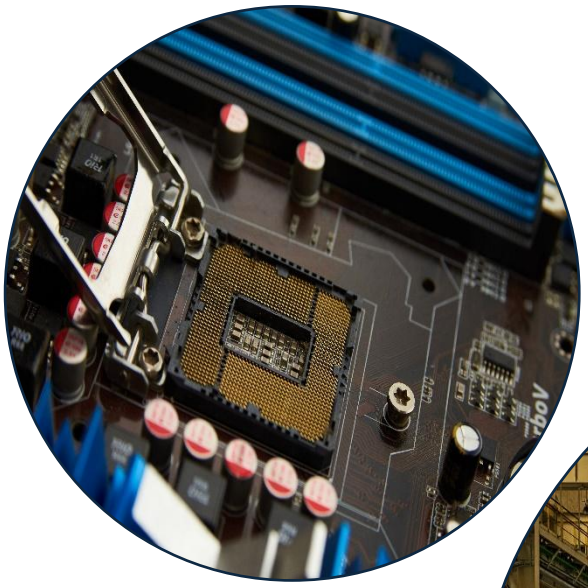


TABLE OF CONTENTS

TABLE OF CONTENTS 2

INTRODUCTION 4

AAU Horizon Europe compendium 4

ABOUT AAU 4

Our Profile and DNA – why should you partner with us? 4

DESTINATION 1 5

LEADERSHIP IN MATERIALS AND PRODUCTION FOR EUROPE 6

DESTINATION 1: CALLS 7

Call – Leadership in materials and production for europe 7

HORIZON-CL4-2026-01-MAT-PROD-14: Improving availability of secondary raw materials through recycling (IA) 8

DESTINATION 2 9

DEVELOPING AN AGILE AND SECURE SINGLE MARKET AND INFRASTRUCTURE FOR DATA-SERVICES AND TRUSTWORTHY ARTIFICIAL INTELLIGENCE SERVICE 10

DESTINATION 2: CALLS 11

Call – Developing an agile and secure single market and infrastructure for data-services and trustworthy artificial intelligence services 11

DESTINATION 3 12

ACHIEVING OPEN STRATEGIC AUTONOMY IN DIGITAL AND EMERGING ENABLING TECHNOLOGIES 13

DESTINATION 3: CALLS 14

Call – Achieving open strategic autonomy in digital and emerging enabling technologies 14

HORIZON-CL4-2026-04-DIGITAL-EMERGING-01: Apply AI: Pilot of the “Science for AI” Pillar of RAISE (“Resource for AI science in Europe”) (RIA) 15

HORIZON-CL4-2026-04-DIGITAL-EMERGING-09: Advanced local digital twins using AI for Early warning and preparedness (IA) 16

HORIZON-CL4-2027-01-DIGITAL-EMERGING-52-two-stage: New approaches for Human/AI collaboration for the workforce of the future (RIA) (Made in Europe and, Data and Robotics partnerships) 17

DESTINATION 4 18

OPEN STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURE, SERVICES, APPLICAITONS AND DATA 18

DESTINATION 4: CALLS 19

Call – Open strategic autonomy in developing, deploying, and using global space-based infrastructure, services, applications and data 19

DESTINATION 5 20

DIGITAL AND INDUSTRIAL TECHNOLOGIES DRIVING HUMAN-CENTRIC INNOVATION 20

DESTINATION 5: CALLS 21

Call – Digital and industrial technologies driving human-centric innovation 21

HORIZON-CL4-2026-04-HUMAN-01: Developing and demonstrating core technologies for Virtual Worlds and Web 4.0 (AI) (Virtual Worlds partnership) 22

INTRODUCTION

AAU HORIZON EUROPE COMPENDIUM

Interested in finding academic partners for the upcoming Horizon Europe calls? At AAU, we have collected, mapped, and showcased AAU researchers' interest in collaborating on specific topics within the six clusters of Pillar 2 (including EU Missions & Cross-cutting activities). Each compendium displays our showcased researcher's relevant expertise within each identified topic, which makes it easy to locate AAU researchers who are interested in collaborating and providing their expertise in your next Horizon Europe proposal.

ABOUT AAU

AAU has campuses in Aalborg, Copenhagen, and Esbjerg, as well as an EU office in Brussels. We have 3.700 staff, 18.000 students and an annual turnover of DKK 3 billion.

AAU is a comprehensive university covering four faculties and 18 departments, such as Sustainability and Planning, Energy, Health Science and Technology, Computer Science, Built Environment, Politics and Society, Culture and Learning.

With problem-based learning at the heart of educational programs, AAU researchers and students are well-equipped to take on current and future societal, environmental and economic challenges.

OUR PROFILE AND DNA – WHY SHOULD YOU PARTNER WITH US?

Collaboration is heavily embedded in the DNA of AAU. We have a strong and natural collaboration with industry and the surrounding society – thus our current strategy is labeled "Knowledge for the World 2.0".

We are a mission-oriented university, with three identified AAU Missions:

1. A Sustainable Danish Energy System
2. Improved Wellbeing Among Children and Youth in Denmark
3. Improving Health Through Coherence and Individualisation

As the second best ranked engineering university in Europe, and being no. 16 globally (ranking from the U.S. News & World Report), as well as being in top 5 of universities pursuing the UN sustainable development goals (THE University Impact Rating), we are a very capable partner and collaborator.

AAU has contributed as coordinator or partner in close to 200 projects in the EU Horizon 2020 Framework Programme. For Horizon Europe we have – so far – contributed to more than 150 projects. We are setting even more ambitious targets for Horizon Europe in 2025 and going forward.

DESTINATION 1

LEADERSHIP IN MATERIALS AND PRODUCTION FOR EUROPE

DESTINATION 1: CALLS

CALL – LEADERSHIP IN MATERIALS AND PRODUCTION FOR EUROPE

HORIZON-CL4-2026-01-MAT-PROD-14: Improving availability of secondary raw materials through recycling (IA)

HORIZON-CL4-2026-01-MAT-PROD-14: IMPROVING AVAILABILITY OF SECONDARY RAW MATERIALS THROUGH RECYCLING (IA)

Morten Enggrob Simonsen

Department of Chemistry and Bioscience
The Faculty of Engineering and Science

CONTACT INFORMATION

Morten Enggrob Simonsen
mes@bio.aau.dk
+4521626924
https://vbn.aau.dk/da/persons/111907

HIGHLIGHTED AAU RESEARCH GROUPS

Leader of research group of Advanced Materials and Circular Solutions, AAU

RELEVANT LINKS OUTSIDE ACADEMIA

Many Industrial partners in different sectors both in Denmark and in Europe

AREA OF EXPERTISE

Development, characterization, and testing of materials (polymers, composites, metals, and ceramics).
Chemical recycling of mixed plastic waste, textiles, thermoset plastic and composite materials (e.g. PCB and plastic with flame retardants) by pyrolysis and solvolysis.
Chemical recycling of batteries and E-waste.
Separation and purification technologies
Quantitative chemical analysis
High temperature and high-pressure technologies
Supercritical CO2 extraction.

RELEVANT PROJECTS

Pyrolysis for green fuels and enabling future green hydrogen (Pyrogreen), Innovationsfonden Denmark, (PI/Project leader for AAU), 2023-2026

DESTINATION 2

DEVELOPING AN AGILE AND SECURE SINGLE MARKET AND INFRASTRUCTURE FOR DATA-SERVICES AND TRUSTWORTHY ARTIFICIAL INTELLIGENCE SERVICE

DESTINATION 2: CALLS

CALL – DEVELOPING AN AGILE AND SECURE SINGLE MARKET AND INFRASTRUCTURE FOR DATA-SERVICES AND TRUSTWORTHY ARTIFICIAL INTELLIGENCE SERVICES

DESTINATION 3

ACHIEVING OPEN STRATEGIC AUTONOMY IN DIGITAL AND EMERGING ENABLING TECHNOLOGIES

DESTINATION 3: CALLS

CALL – ACHIEVING OPEN STRATEGIC AUTONOMY IN DIGITAL AND EMERGING ENABLING TECHNOLOGIES

HORIZON-CL4-2026-04-DIGITAL-EMERGING-01: Apply AI: Pilot of the “Science for AI” Pillar of RAISE (“Resource for AI science in Europe”) (RIA)

HORIZON-CL4-2026-04-DIGITAL-EMERGING-09: Advanced local digital twins using AI for Early warning and preparedness (IA)

HORIZON-CL4-2027-01-DIGITAL-EMERGING-52-two-stage: New approaches for Human/AI collaboration for the workforce of the future (RIA) (Made in Europe and, Data and Robotics partnerships)

HORIZON-CL4-2026-04-DIGITAL-EMERGING-01: APPLY AI: PILOT OF THE "SCIENCE FOR AI" PILLAR OF RAISE ("RESOURCE FOR AI SCIENCE IN EUROPE") (RIA)

Andrés R. Masegosa

Department of Architecture, Design and Media Technology
The Technical Faculty of IT and Design

CONTACT INFORMATION

Andrés R. Masegosa
arma@cs.aau.dk
+45 52718753
https://vbn.aau.dk/da/persons/arma

HIGHLIGHTED AAU RESEARCH GROUPS

Machine Learning Group, Department of Computer Science, Aalborg University

RELEVANT LINKS OUTSIDE ACADEMIA

Collaborations with industry on probabilistic modeling and AI applications

Member of international research networks in probabilistic machine learning

Organizer of the Nordic Probabilistic AI School (ProbAI)

AREA OF EXPERTISE

Trustworthy and Explainable AI
Deep Learning and Neural Networks
Probabilistic Programming
Modeling Uncertainty
Large-Scale Machine Learning.

Probabilistic Machine Learning for large-scale data modeling
Advance Risk Modelling with Probabilistic ML
Bayesian methods for deep learning models.

RELEVANT PROJECTS

DK-Future: Probabilistic Geospatial Machine Learning for Predicting Future Danish Land Use under Compound Climate Impacts (PI, Villum Foundation, 800K euros)
Explainable Machine Learning: A Probabilistic Approach (Co-PI, Spanish National Grant, 2020-2022)
DarkScience Project: Illuminating microbial dark matter through data science (Villum Foundation)

HORIZON-CL4-2026-04-DIGITAL-EMERGING-09: ADVANCED LOCAL DIGITAL TWINS USING AI FOR EARLY WARNING AND PREPAREDNESS (IA)

Andrés R. Masegosa

Department of Architecture, Design and Media Technology
The Technical Faculty of IT and Design

CONTACT INFORMATION

Andrés R. Masegosa
arma@cs.aau.dk
+45 52718753
https://vbn.aau.dk/da/persons/arma

HIGHLIGHTED AAU RESEARCH GROUPS

Machine Learning Group, Department of Computer Science, Aalborg University

RELEVANT LINKS OUTSIDE ACADEMIA

Collaborations with industry on probabilistic modeling and AI applications

Member of international research networks in probabilistic machine learning

Organizer of the Nordic Probabilistic AI School (ProbAI)

AREA OF EXPERTISE

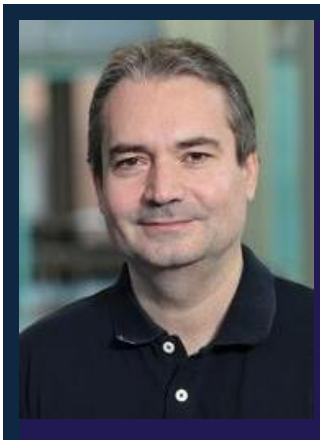
Trustworthy and Explainable AI
Deep Learning and Neural Networks
Probabilistic Programming
Modeling Uncertainty
Large-Scale Machine Learning.

Probabilistic Machine Learning for large-scale data modeling
Advance Risk Modelling with Probabilistic ML
Bayesian methods for deep learning models.

RELEVANT PROJECTS

DK-Future: Probabilistic Geospatial Machine Learning for Predicting Future Danish Land Use under Compound Climate Impacts (PI, Villum Foundation, 800K euros)
Explainable Machine Learning: A Probabilistic Approach (Co-PI, Spanish National Grant, 2020-2022)
DarkScience Project: Illuminating microbial dark matter through data science (Villum Foundation)

HORIZON-CL4-2027-01-DIGITAL-EMERGING-52-TWO-STAGE: NEW APPROACHES FOR HUMAN/AI COLLABORATION FOR THE WORKFORCE OF THE FUTURE (RIA) (MADE IN EUROPE AND, DATA AND ROBOTICS PARTNERSHIPS)



Peter Dolog

Department of Computer Science
The Technical Faculty of IT and Design

CONTACT INFORMATION
Peter Dolog
dolog@cs.aau.dk
+45 99409974
https://vbn.aau.dk/da/persons/dolog

HIGHLIGHTED AAU RESEARCH GROUPS
Lead of Web Science and Engineering, member of Artificial Intelligence and Machine Learning, member of Data Engineering Science and Systems

AREA OF EXPERTISE
Personalization
User Modeling
AI tools for human assistance.

AI methods for personalized recommendation and advice
Recommender systems
User modelling.

RELEVANT PROJECTS
EU project KIWI: Knowledge in a Wiki
Relevant Expertise: Personalization, User Modeling, AI tools for human assistance

EU project MEco - Medical Ecosystem - Personalized Event-Based Surveillance
Relevant Expertise: Personalization, User Modeling, AI tools for surveillance personal assistance

DESTINATION 4

OPEN STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURE, SERVICES, APPLICAITONS AND DATA

DESTINATION 4: CALLS

CALL – OPEN STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING, AND USING GLOBAL SPACE-BASED INFRASTRUCTURE, SERVICES, APPLICATIONS AND DATA

DESTINATION 5

DIGITAL AND INDUSTRIAL TECHNOLOGIES DRIVING HUMAN-CENTRIC INNOVATION

DESTINATION 5: CALLS

CALL – DIGITAL AND INDUSTRIAL TECHNOLOGIES DRIVING HUMAN-CENTRIC INNOVATION

HORIZON-CL4-2026-04-HUMAN-01: Developing and demonstrating core technologies for Virtual Worlds and Web 4.0 (AI) (Virtual worlds Partnership)

HORIZON-CL4-2026-04-HUMAN-01: DEVELOPING AND DEMONSTRATING CORE TECHNOLOGIES FOR VIRTUAL WORLDS AND WEB 4.0 (AI) (VIRTUAL WORLDS PARTNERSHIP)

Cedomir Stefanovic

Department of Electronic Systems
The Technical Faculty of IT and Design

CONTACT INFORMATION

Cedomir Stefanovic
cs@es.aau.dk
+ 45 21124974
https://vbn.aau.dk/en/persons/126055/

HIGHLIGHTED AAU RESEARCH GROUPS

Edge Computing and Networking (leader)
Connectivity (secondary affiliation)

RELEVANT LINKS OUTSIDE ACADEMIA

ESAC (European Interdisciplinary Society for AI in Cancer Research)

AREA OF EXPERTISE

5G/6G systems and communication
Internet of Things
Wireless communications
Cloud/Edge computing
Open radio access network (O-RAN)
Cloud-connected assistive robotics and technology
Advanced human-machine interfacing
Haptic communications.

RELEVANT PROJECTS

DFF project 2 CLIMB
H2020 RIA TACTILITY
H2020 RIA SIXTHSENSE