

TFK programme, funded projects 2024

<p>Project title: Developing the Artificial Intelligence of Things</p>	
<p>Coordinator</p> <p>Helsingin Yliopisto</p> <p>Petteri Nurmi, petteri.nurmi@helsinki.fi</p>	<p>The Developing the Artificial Intelligence of Things project brings together two Finnish Universities (University of Helsinki (UH) and Jyväskylä University (JYU)) with two high-quality and rapidly improving universities in the ASEAN region (Singapore Management University (SMU) and Chiang Mai University (CMU), Thailand).</p> <p>The project goals, activities, and impacts are as follows:</p> <ol style="list-style-type: none"> 1. The project collaboratively creates 3 new courses (in total 5 ECTS) on developing Artificial Intelligence of Things (AIoT) solutions. These courses are designed based on constructivist education theories and they will use modular elements that can be shared and customized. The shared elements can be reused across all partner institutions and customizable elements can be adapted by each partnering HEI according to their needs. The courses are designed to include theoretical parts and practical hands-on sessions where students engage in groups on projects where IoT computing equipment and sensors and AI software are used to create new kinds of AIoT solutions. The projects will target topic areas that are tailored to each HEI and include topics that benefit society (environmental monitoring and healthcare) while also having commercial relevance (urban computing, extended reality). The theoretical parts will be made available beyond the project period as open online courses. 2. The project engages in extensive international mobility by giving the courses once at each HEI as intensive courses and having students and faculty from each HEI join the courses. This offers opportunities for students to engage in cross-cultural and international collaboration, while also receiving differing viewpoints by being exposed to teaching staff from different institutions. The mobility events will also be used to establish further collaborations, e.g., academic partnership programs and research exchanges and thus the educational activities also serve as seed for deepening collaboration between the HEIs. 3. The project will test and evaluate new kinds of teaching methods, focusing on effective means of hybrid group work which is becoming increasingly important. This allows testing larger group sizes and assessing the effectiveness of the methods. We plan to test in parallel differing methods with the goal of evaluating their suitability and receiving feedback that could improve academic knowledge on hybrid education practices for
<p>Partners</p> <p>Jyväskylä University, Singapore Management University, Chiang Mai University</p>	

groupwork. Besides reporting our findings, we also plan to submit a joint paper on an educational venue about the findings.

The outcomes are new courses that will be fully integrated into the curricula at the Finnish HEIs and at the international HEIs. The project produces new online teaching materials, knowledge on hybrid teamwork for teaching project work, and offers international experience, skills, and training to students in a topic area that satisfies a rapidly growing educational need and where there is globally a lack of sufficient talent.



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