

Preface

The 1st Linnaeus Student Conference on Information Technology (LSCIT) was held for two days between September 26 and September 27, 2019 in the Växjö campus of Linnaeus University. There were also online participants from different countries as well as different parts of Sweden. The Deputy Vice-Chancellor of Linnaeus University Professor Ann-Charlotte Larsson inaugurated the conference. She appreciated this innovative initiative to organize a conference specifically for the students. Her short and inspiring speech acted as a fuel for the whole conference.

The presentation session began with the master's students Bowen Chen, Kateryna Hrabovska, Zihan Song and Oleksandr Lutsiuk who showed their findings from their student paper "*Healthcare Monitoring System for Heart Diseases based on Internet of Things*". Later, Gunilla Bradley, Professor Emerita of KTH Royal Institute of Technology, gave a keynote on "*Social and psychological effects of computerization*".

After lunch, we had a keynote speech about "*Digital Transformation in the Cargo-handling Industry*" from Mikael Antonsson and Johan Hellström, digital business developers from the industrial equipment and solutions provider Cargotec. Afterwards, PhD student in Informatics Niki Chatzipanagiotou presented her research on "*The Use of Digital Artefacts in Managers' Everyday Cooperative Work Practice*". Efstratios Grammenis and Antonios Mourikis presented a paper based on their master's thesis "*Academic libraries in the digital era: An assessment of the Institutional Repository role in supporting research as a digital service*". PhD student in Informatics Lars Magnusson presented his research titled "*On system thinking and information security-how modern ICT structures drive system thinking for the future*".

The second day was equally exciting. Senior Lecturer Sarfraz Iqbal and Associate Professor Päivi Jokela from the Department of Informatics presented their ongoing research on "*Exploring Drivers and Challenges for Ageing Society regarding New Technologies using Systems Thinking*". Teaching Assistant Ali Hamidi from the Department of Informatics presented a paper based on his master's thesis "*Increasing STEM engagement through the mediation of textile materials combined with physical computing*". Lecturer Romain Christian Herault from the Department of Computer Science and Media Technology presented the research "*Visualizing Learners' Navigation Behaviour Using 360 Degrees Interactive Videos*" that he did together with his fellow researchers Alisa Lincke, David Lozano Prieto, Elin-Sofie Forsgårde and Marcelo Milrad. Then we had an interesting keynote speech by Fabian Von Scheele, Associate Professor, Linnaeus University, about "*Writing an award winning research paper*". Senior Lecturer from the Department of Informatics Mexhid Ferati presented his research on "*HCI and accessibility*".

After the lunch break, PhD student in Informatics Behrooz Golshan presented "*Methodological inefficiencies for investigating digital strategy; application of Appreciative Systems Models for longitudinal studies*". Soon after, a group of exchange students from Albania shared their experience in Sweden with a nice presentation titled, "*Team Albania: How we got here and our experience as IT students*". PhD student in Informatics Erdelina Kurti talked about "*Institutional Tensions in the Digitalization of Incumbent Business Models*". The conference ended with the presentation from the PhD student in Informatics Aparna Lohiya who talked about "*Digitalization in the retail Industry: transition to omni-channel*".



In the current conference proceedings, we have included two papers. The first paper is written by Bowen Chen, Kateryna Hrabovska, Zihan Song and Oleksandr Lutsiuk. The paper title is “*Healthcare Monitoring System for Heart Diseases based on Internet of Things*”. The authors argue that with the advancement of technology and medical information, smart home medical devices have become increasingly popular. However, medical care equipment for the elderly has not been widely researched and it is still a problem for producing devices that can comprehensively and deeply monitor the physical condition of the elderly. The authors carried out interviews and the Future Workshop technique to the target group, including medical staff and elderly, to collect and analyze information about their opinions in the healthcare monitoring system for heart disease. Then the authors designed a healthcare monitoring device based on the Internet of Things that monitors the user's (especially elderly) heart from both horizontal and vertical angles.

The other paper titled “*Academic libraries in the digital era: An assessment of the Institutional Repository role in supporting research as a digital service*” is written by Efstratios Grammenis and Antonios Mourikis. In this paper, the authors assess the role of Information Repositories (IRs) in supporting academic research as a digital service by studying the literature and conducting open interviews with dedicated librarians. Academic libraries around the world have

been adopting new technologies and ICT applications to keep up with the developments as well as to remain their patrons strongly connected with them. For these reasons, the library authorities have developed the Institutional Repositories (IR), infrastructures and software systems with ultimate target to store and preserve the knowledge that is produced in the universities. The IRs have so far managed to collect the research output at a satisfactory level. However, many things need to be done in order for the IRs to be a real safe keeper for the universities. The findings from this research not only confirmed the initial assumptions of the authors, but also revealed new roles for the IRs that can guide the universities beyond their traditional mission.

We always believe that each one of our students makes useful knowledge contributions in the form of a thesis or any other student paper. With the Linnaeus Student Conference on Information Technology (LSCIT), the department of Informatics aims to give the current and graduated students of Linnaeus University a platform to present and publish their research as well as listen to other researchers and industry representatives. We also believe that with the first edition of this conference we have started a tradition that will continue in the coming years.

On behalf of the organizing committee,
Soumitra, Ali and Anita