SecUre aNd Resilient digItal tranSformation of healthcarE (SUNRISE)
Date: 25 November, 2024

Time	Session	Time	Details
09:00-09:10	Opening Session Location: Søndre Allmenning 1	9:00	Workshop opening by Sandeep Pirbhulal and Habtamu Abie
09:10-09:50	Invited Keynote Location: Søndre Allmenning 1	9:10	Ankur Shukla AI for Healthcare Security: The Intersection of Innovation and Resilience
09:50-10:30	Session one Resilience and Dynamic Risk Assessment in Healthcare Location: Søndre Allmenning 1	9:50 10:10	Sandeep Pirbhulal An Architecture of Adaptive Cognitive Digital Twins for Resilient Healthcare Infrastructures and Services Sabarathinam Chockalingam Safety and Security Risk Assessment in Healthcare and Critical Infrastructures
10:40-11:20	Invited Keynote Location: Søndre Allmenning 1	10:40	Invited keynote
11:20-12:20	Session two Cybersecurity Adaptive and Continuous Authentication in Healthcare Location: Søndre Allmenning 1	11:20 11:40 12:00	Ali Hassan Sodhro 5G Care: Adaptive Authentication Approach for 5G enabled Remote Healthcare Infrastructures Ahmed Fraz Baig A Secure Privacy-Preserving Multimodal Continuous Authentication Protocol for Healthcare Systems Sanjay Misra Cyber Security in Healthcare Systems: A Review of Tools and Attack Mitigation Techniques
12:30-13:20	Lunch		
13:20-14:20	Session three Panel discussion Location: Søndre Allmenning 1	13:20	Panel Discussion on Autonomy, Resilience, Mental Models, Cybersecurity for Children's Wellbeing **Panelists:** Kai Rannenberg (GUF), Jun Zhao (Oxford University), Karen Renaud (University of Strathclyde), Suzanne Prior (Abertay University), Farzana Quayyum (NTNU)
14:20-15:20	Session four Supporting Projects Results Presentations Location: Søndre Allmenning 1	14:20	Sandeep Pirbhulal CybAlliance (International Alliance for Strengthening Cybersecurity and Privacy in Healthcare) Sokratis Katsikas/ Vasileios Gkioulos/Habtamu Abie SFI NORCICS (Norwegian Center for Cybersecurity in Critical Sectors) Emilia Gugliandolo/Habtamu Abie EU-CIP (European Knowledge Hub and Policy Testbed for Critical Infrastructure Protection)
15:20-15:30	SUNRISE workshop Closing session		

Integrating sustainability and digitalization in teaching and learning
Date: 25 November, 2024

14:00-14:45	Intro Location: Storsalen	14:00 Birgit Rognebakke Krogstie Sustainability in IT education: Overview of pedagogical trends.
14:45-15:30	Discussion Location: Storsalen	14:45 What's new? Exchange of experience on current pedagogical practices Open for all participants
15:30-15:45		Break
15:45-16:30	Presentation Location: Storsalen	15:45 John Krogstie Sustainability reporting: From an auditing concern to an IT concern
16:30-17:00	Discussion Location: Storsalen	16:30 Discussion and suggestions for joint activities
		End of workshop

UDIT – Norwegian Conference for Education and Didactics in IT subjects
Date: 26 November, 2024

09:15-10:15	UDIT Keynote Location: Storsalen	9:15 Keynote speaker: Juho Leinonen Generative AI in Computing Education: A Transformative Tool or a Troubling Trend?
10:15-10:30	Break	
10:30-12:00	UDIT 1: Ymse tema Location: Storsalen	10:30 Tengel Sandtrø Verdien av et tverrfaglig semester, slik studentene ser det 11:00 Anna Szlavi, Hanne Sofie Haugland and Letizia Jaccheri Role Models as an Intervention for Gender Diversity in Computing Education 11:30 Kateryna Osadcha, Justyna Szynkiewicz and Mohd Sameen Chishti Using Microsoft Copilot Chat in the Work of IT Educators: Pilot Study
12:00-13:00	Lunch	
13:00-14:00	NIK Keynote Location: Storsalen	13:00 Keynote speaker: Øystein Haugen Modeling – now more than ever?
14:00-14:15	Break	
14:15-17:00	UDIT 2A Peer collaboration and peer review Location: Storsalen	14:15 Omid Mirmotahari and Yngvar Berg Trenger vi læringsassistenter? Hvordan kan hverandre-vurdering og/eller egen-vurdering gi god læringsutbytte. 14:45 Terje Idland, Rolando Gonzalez and Øyvind Aas Applying Liljedahl's Thinking Classrooms in a Higher Education Digital Technology Course 15:15 Oline Sæverud Aksnes, Andreas Brandsæter, Elise Indregård Petersen and Hans Georg Schaathun Programmeringsparadokset etter Sfard og Leron 15:45 Somayeh Bayat Esfandani and Trond Aalberg Students' perceptions toward essential functionalities and qualities of peer code assessment tools 16:15 Attiqa Rehman, Rune Hjelsvold and Leonardo Montecchi A Case Study on Student Perspective of Peer Code Review (PCR)
14:15-16:15	UDIT 2B Development of educational tools Location: Nordre Allmenning 3	14:15 Oleks Shturmov and Michael Kirkedal Thomsen remarks - Machinery for Marking Student Work 14:45 Line Kolås, Robin Isfold Munkvold and Adam Palmquist Students as developers of educational tools - What educational challenges do they address and which learning approaches do they implement? 15:15 Joachim Kristensen, Ján Perháč, Michael Kirkedal Thomsen, Lars Tveito, Oleks Shturmov, Samuel Novotný and Sergej Chodarev OnlineProver: First Experience with Teaching Formal Proofs 15:45 Mohsen Toorani Improving Fairness and Quality in Master's Thesis Assessment in Norwegian Higher Education
19:00-21:30	Conference Dinner Location: Grand Terminus Street address: Zander Kaaes gate 6, 5015 Bergen	

UDIT – Norwegian Conference for Education and Didactics in IT subjects
Date: 27 November, 2024

Time	Session		
09:00-10:00	NOKOBIT Keynote Location: Storsalen	9:00	Keynote speaker: Björn Þór Jónsson On The Importance of Database Techniques for Multimedia Applications
10:00-10:15	Break		
10:15-12:00	UDIT 3: Assessment Location: Storsalen	10:15	Guttorm Sindre Rettferd i variantoppgåver med tilfeldig trekking
		10:45	Øyvind Aas and Wasana Leithe Automated adaptive testing vs. linear testing in undergraduate mathematics
		11:15	Hanne Sørum and Wanda Presthus Insights from the Perspective of Examiners on the Justification of Grades in Higher Education in Norway
12:00-13:00	Lunch		
13:00-14:00	NISK Keynote Location: Storsalen	13:00	Keynote speaker: Per Thorsheim Why is academia so bad at selling their research, and why is private sector so afraid of cooperating with researchers?
14:00-14:15	Break		
14:15-16:00	UDIT 4 Syllabus and Conceptualisation Location: Storsalen	14:15	Sondre Bolland, Andreas Haraldsrud, Siri Jensen, Filip Strömbäck, Arne Styve, Erlend Tøssebro, Eirik Valseth and Torstein Strømme The Nordic Prior Knowledge Test in Programming: Motivation, Development and Preliminary Results
		14:45	Sondre Bolland, Aleksandr Popov, Tyra Eide, Robert Kordts and Torstein Strømme Fundamentals of Norwegian CS1
		15:15	Leonardo Montecchi Shaping a Modern Programming Paradigms Course for Advanced University Students
		15:45	Rolando Gonzalez, Trond Klevgaard and Kjetil Raaen Students' Visualisations of Programming Concepts: An Exploratory Analysis

NOKOBIT – Norwegian Conference for Organizations' Use of IT
Date: 26 November, 2024

09:15-10:15	UDIT Keynote Location: Storsalen	9:15 Keynote speaker: Juho Leinonen Generative AI in Computing Education: A Transformative Tool or a Troubling Trend?
10:15-10:30	Break	
10:30-12:00	Session one (AI Technologies and Societal Impact) Location: Søndre Allmenning 1	10:30 Dorthea Mathilde Kristin Vatn and Patrick Mikalef Explainable AI (XAI) in a societal citizen perspective – power, conflicts, and ambiguity 10:50 Israt Tabassum and Vimala Nunavath A Deep-Learning Based Approach for Multi-class Cyberbullying Classification Using Social Media Text and Image Data 11:10 Karianne Klovning, Hedda Haugland Svåsand and Kjersti Berg Danilova Kunstig intelligens og kreativitet 11:30 Kjersti Berg Danilova and Astrid Klotz Managing responsible AI in organizations 11:50 Magnus Ulvestad Paulsen and Jefferson Seide Molléri Algorithmic Profiling in the Workplace: Employee Perceptions and Technostress
12:00-13:00	Lunch	
13:00-14:00	NIK Keynote Location: Storsalen	13:00 Keynote speaker: Øystein Haugen Modeling – now more than ever?
14:00-14:30	Break	
14:30-18:00	NIK meets BLDL Location: Auditorium Egget Street address: Parkveien 1, 5007 Bergen	14:30 NIK meets Bergen Language Design Laboratory (BLDL): https://conf.researchr.org/home/bldl-15 The program includes a talk from Bjarne Stroustrup. Bjarne Stroutstrup is the designer and original implementor of C++

19:00-21:30	Conference Dinner Location: Grand Terminus Street address: Zander Kaaes gate 6, 5015 Bergen

NOKOBIT – Norwegian Conference for Organizations' Use of IT

Date: 27 November, 2024

09:00-10:00	NOKOBIT Keynote Location: Storsalen	9:00 Keynote speaker: Björn Þór Jónsson On The Importance of Database Techniques for Multimedia Applications
10:00-10:15	Break	
10:15-12:00	Session two (Information Systems, Data Analytics, and Sustainability) Location: Søndre Allmenning 1	10:15 John Krogstie Using Techniques from Neuroscience in Information Systems Modelling Research: A Systematic Mapping Study 10:35 Mathias Oppedal Heggelund, Syed Sajid Hussain and Babak A. Farshchian Information overload – A case study of using an integrated electronic health record system in the emergency room 10:55 Dimitra Chasanidou, Costas Boletsis and John Krogstie "It should last long without harming the environment": perspectives on sustainability in an environmental and historical project 11:15 Bjørnar Tessem and Aida Ashrafi Collective Anomaly Detection in Fisheries 11:35 Johannes Skivdal, Laurence Dierickx and Duc-Tien Dang-Nguyen VeriDash: An AI-Driven, User-Centric Open Source Dashboard for Enhancing Multimedia Verification
12:00-13:00	Lunch	
13:00-14:00	NISK Keynote Location: Storsalen	13:00 Keynote speaker: Per Thorsheim Why is academia so bad at selling their research, and why is private sector so afraid of cooperating with researchers?
14:00-14:15	Break	
14:15-16:00	Session three (Digital Transformation and Critical Operations) Location: Søndre Allmenning 1	14:15 Egil Øvrelid and Zhiyi Wang Restructuring Digital Infrastructures: Architectural Transformation through Sociotechnical Interplay in large-scale incumbent organizations 14:35 Kristine Steen-Tveit, Bjørn Erik Munkvold and Bente Skattør Enhancing Team Situational Awareness in Crime Scene Investigation through the Use of Head Cameras 14:55 Ivar Mykkeltvedt and Andreas L Opdahl How do Norwegian enterprises create awareness of cyber security? 15:15 Camille Sivelle, David Palma and Katrien De Moor Extended Reality in critical sectors: Exploring the use cases and challenges 16:35 Miriam Lande and Dag Håkon Olsen The pandemic and the digitalization of Norwegian enterprises

NISK – Norwegian Information Security Conference

Date: 26 November, 2024

Time	Session	Program
09:15-10:15	UDIT Keynote Location: Storsalen	9:15 Keynote speaker: Juho Leinonen Generative AI in Computing Education: A Transformative Tool or a Troubling Trend?
10:15-10:30	Break	
10:30-12:00	Session three (Incident Response) Location: Nordre Allmenning 3	10:30 Nikola Gavric, Guru Bhandari and Andrii Shalaginov Revisiting FlowGuard: A Critical Examination of the Edge-Based IoT DDoS Defense Mechanism 11:00 Vahiny Gnanasekaran and Martin Gilje Jaatun Security Architecture for Distribution System Operators: A Norwegian Perspective 11:30 Noah Holmdin and Martin Gilje Jaatun Fuzz Testing of a Wireless Residential Gateway
12:00-13:00	Lunch	
13:00-14:00	NIK Keynote Location: Storsalen	13:00 Keynote speaker: Øystein Haugen Modeling – now more than ever?
14:00-14:15	Break	
14:15-17:00	Session two (Machine learning and natural intelligence) Location: Nordre Allmenning 3	14:15 Vegard Berge and Chunlei Li Enhanced Anomaly Detection in Industrial Control Systems aided by Machine Learning 14:45 Rebeka Toth and Olga Limonova Impact of Emotions on User Behavior Toward Phishing Emails 15:15 Elias Brattli Sørensen Elevation of MLsec: a security card game for bringing threat modeling to machine learning practitioners
19:00-21:30	Conference Dinner Location: Grand Terminus Street address: Zander Kaaes gate 6, 5015 Bergen	

NISK – Norwegian Information Security Conference
Date: 27 November, 2024

09:00-10:00	NOKOBIT Keynote Location: Storsalen	9:00 Keynote speaker: Björn Þór Jónsson On The Importance of Database Techniques for Multimedia Applications
10:00-10:15	Break	
10:15-12:00	Session three: Incident Response Location: Nordre Allmenning 3	10:15 Vilja Steffensen and Vahiny Gnanasekaran Information Sharing between the Computer Security Incident Response Team and its Members: An Empirical Study 10:45 Raymond Hagen, Lasse Øverlier and Kirsi Helkala The Role of Custom Scripting in APT Incident Response 11:15 Odin Heitmann From Uncertainty to Prosecution: Enhancing Cyber Resilience through Forensic Readiness
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14:00-14:15	Break	
14:15-16:00	Session four: Security Design Location: Søndre Allmenning 2	14:15 Sander Brekke and Patrick Bours Continuous Age Detection using Keystroke Dynamics 14:45 Slobodan Petrović Towards a Framework for the Design of Nonlinear Combiners in Ternary Logic 15:15 Surya Kahtyat Designing a Decentralized Identity Verification Platform 15:45 Abha Pokharel, Casandra Grundstrom and Surya Kathayat End-User Privacy, Security, and Data Ownership Concerns on the Helsenorge Platform: A Mixed-Methods Study

NIK – Norwegian Informatics Conference
Date: 26 November, 2024

09:15-10:15	UDIT Keynote Location: Storsalen	9:15 Keynote speaker: Juho Leinonen Generative AI in Computing Education: A Transformative Tool or a Troubling Trend?
10:15-10:30	Break	
10:30-12:00	Session one (Medical AI Applications) Location: Søndre Allmenning 2	10:30 Maïlys Hau, Henrik Kildahl, Federico Veronesi, Frank Lindseth, Bjørnar Grenne and Gabriel Kiss Automatic 3D Segmentation of Closed Mitral Valve Leaflets on Transesophageal Echocardiogram 11:00 Shanmugapriya Survarachakan, Michael Staff Larsen, Rahul Prasanna Kumar and Frank Lindseth Automatic Segmentation of Hepatic and Portal Veins using SwinUNETR and Multi-Task Learning 11:30 Jarl Sondre Sæther, Bendik Holter, Frank Lindseth and Gabriel Kiss Enhancing Cell Detection with Transformer-Based Architectures in Multi-Level Magnification Classification for Computational Pathology
12:00-13:00	Lunch	
13:00-14:00	NIK Keynote Location: Storsalen	13:00 Keynote speaker: Øystein Haugen Modeling – now more than ever?
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10:00-10:15	Break	
10:15-12:00	Session three (Software Applications) Location: Søndre Allmenning 2	10:15 Aleksander Pedersen, Tanita Fossli Brustad, Mona Lahm Høgbakk and Silje C. Wangberg Augmented reality projections as a tool to enrich simulations in health care education: Combining AR projector technology with manikins 10:45 Joachim Andreassen and Donn Morrison Discovery of endianness and instruction size characteristics in binary programs from unknown instruction set architectures 11:15 Jungwon Seo, Ferhat Ozgur Catak and Chunming Rong Understanding Federated Learning from IID to Non-IID dataset: An Experimental Study 11:45 Miriam Kopperstad Wolff, Sam Royston, Anders Lyngvi Fougner, Hans Georg Schaathun, Martin Steinert and Rune Volden GluPredKit: Development and User Evaluation of a Standardization Software for Blood Glucose Prediction
12:00-13:00	Lunch	
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14:00-14:15	Break	
14:15-16:00	Session four (AI and media) Location: Nordre Allmenning 3	14:15 Gloria Anne Babile Kasangu, Alain D. Starke, Anna Nilsen and Christoph Trattner Picture This: How Image Filters Affect Trust in Online News 14:45 Bilal Mahmood, Mehdi Elahi, Lubos Steskal and Samia Touileb Can Large Language Models Support Editors Pick Related News Articles? 15:15 Khadiga Seddik Exploring the Ethical Challenges of AI and Recommender Systems in the Democratic Public Sphere 15:45 Balazs Mosolygo, Bahareh Fatemi, Fazle Rabbi and Andreas Opdahl Evaluating GraphRAG's Role in Improving Contextual Understanding of News in Newsrooms.