CS Research Day 2022

CS building library: Posters

1. Poster: *Denoising MEG Sensor Noise with Deep CNNs*Presenter: **Victoria Oberländer**, Department of Computer Science

2. Poster: Compositional Generalization in Grounded Language Learning via Induced Model Sparsity

Presenter: Sam Spilsbury, Department of Computer Science

- 3. Poster: *Improved Training of Physics-Informed Neural Networks with Model Ensembles*Presenter: **Katsiaryna Haitsiukevich**, Department of Computer Science
- 4. Poster: *Hierarchical Imitation Learning with Vector Quantized Models*Presenter: **Kalle Kujanpää**, Department of Computer Science
- 5. Poster: *Beyond Standard Performance Measures in Extreme Multi-label Classification*Presenter: **Erik Schultheis**, Department of Computer Science
- 6. Poster: *Speeding-up One-vs-All Training for Extreme Classification via Smart Initialization*Presenter: **Erik Schultheis**, Department of Computer Science
- 7. Poster: *Detecting Sequential Genre Change in Eighteenth-Century Texts*Presenter: **Jinbin Zhang**, Department of Computer Science
- 8. Poster: *Vertex Connectivity in Polylogarithmic Max-Flows*Presenter: **Sorrachai Yingchareonthawornchai**, Department of Computer Science
- 9. Poster: *Sparse Matrix Multiplication in the Low-Bandwidth Model*Presenter: **Chetan Gupta**, Department of Computer Science
- 10. Poster: *Automated Rendering of DNA Strand Displacement Systems*Presenter: **Pekka Orponen**, Department of Computer Science
- 11. Poster: Algorithmic Design of 3D Wireframe RNA Polyhedra Presenter: **Antti Elonen**, Department of Computer Science
- 12. Poster: Energy-based-models for Retrosynthesis and Reaction Prediction Presenter: Najwa Laabid, Department of Computer Science
- 13. Poster: Visual Localization via Few-Shot Scene Region Classification Presenter: **Shuzhe Wang**, Department of Computer Science
- 14. Poster: *Approximate Bayesian Computation with Domain Expert in the Loop*Presenter: **Ayush Bharti**, Department of Computer Science
- 15. Poster: *Non-separable Spatio-temporal Graph Kernels via SPDEs* Presenter: **Alexander Nikitin**, Department of Computer Science

16. Poster: *Provably Expressive Temporal Graph Networks*Presenter: **Amauri Souza**, Department of Computer Science

17. Poster: *Priorsense: Intuitive and Efficient Bayesian prior Sensitivity Analysis*Presenter: **Noa Kallioinen**, Department of Computer Science

18. Poster: *HMC for Bayesian ODEs with Gaussian processes*Presenter: **Niko Siccha**, Department of Computer Science

19. Poster: Coupled HMM: Modeling the Dynamics of MRSA Colonization and It's Decolonization Presenter: **Onur Poyraz**, Department of Computer Science

Lobby area outside CS library: Service presentations

- 20. Interactive Poster: *Computer Science and Sustainable Development Goals*Presenters: **Aija Kukkala, Samuli Ojala & Matti Ahlgren**, Department of Computer Science
- 21. Demo: Aalto's Research Services
 Presenters: Katri Seitsonen, Petri Kanninen, Charlotte Forsgård & Lucie Hradecká, Research
 Services

22. Poster: *Aalto Scientific Computing Services for Research Support*Presenter: **Richard Darst**, Department of Computer Science

Lecture room T5: Posters & Demos

- 23. Poster: *Patients' Experiences of Patient Portal and It's Usability*Presenter: **Saija Simola**, Department of Computer Science
- 24. Poster: *Examining Motivation in Introductory Programming*Presenter: **Hannu Pesonen**, Department of Computer Science
- 25. Poster: Allocation of Compliance Responsibilities in the Artificial Intelligence Lifecycle Presenter: Ana Paula Gonzalez Torres, Department of Computer Science
- 26. Poster: Trustworthy and Inclusive AI services in the Public Sector
 Presenter: **Karolina Drobotowicz**, Department of Computer Science
- 27. Poster: An Approach to Computational Crisis Narrative Analysis
 Presenter: **Henna Paakki**, Department of Computer Science
- 28. Poster: Language of Algorithms: Agency, Metaphors, and Deliberations in Al Discourses
 Presenter: Kaisla Kajava, Department of Computer Science
- 29. Poster: Temporal and Spatial Variations of Country-scale Road Usage Patterns: a case of Finland

Presenter: Zhiren Huang, Department of Computer Science

- 30. Poster: Forward Reliability, Resilience, Robustness and Elasticity in Orchestrating Machine Learning Service across Edge-Cloud Environments

 Presenter: Minh Tri Nguyen, Department of Computer Science
- 31. Poster: Restoration of Historical Music Recordings Using Deep Learning
 Presenter: Eloi Moliner Juanpere, Department of Signal Processing and Acoustics
- 32. Poster & Demo: Developing an Automatic Speaking Assessment System for Second Language Learners'

Presenters: Mikko Kurimo, Yaroslav Getman & Ekaterina Voskoboinik, Department of Signal Processing and Acoustics

- 33. Demo: *Understanding Game Theory as Distributed Computing*Presenter: **Juho Hirvonen**, Department of Computer Science
- 34. Poster: BookSampo Finnish Fiction Literature on the Semantic Web Presenter: Annastiina Ahola, Department of Computer Science
- 35. Poster: LawSampo Finnish Legislation and Case Law on the Semantic Web Presenter: Minna Tamper, Department of Computer Science
- 36. Poster: Manual Quality Control with Freesurfer 7.1: Key Problem Areas and Importance of Corrections

Presenter: Vesa Vahemaa, Department of Computer Science

Lecture room T6: Short presentations

15:10	Title: Modeling Epidemics Presenter: Abbas K. Rizi, Department of Computer Science
15:13	Title: A New Tool for Early Solar Storm Warnings Presenter: Andreas Korpi-Lagg, Department of Computer Science
15:16	Title: Estimating Alternative Splicing Events from Single Cell RNA-seq Data Presenter: Lu Cheng, Department of Computer Science
15:19	Title: Automatic Speaking Assessment for Second Language Learners' Spontaneous Speech in Under-Resourced Languages Presenter: Mikko Kurimo, Department of Signal Processing and Acoustics
15:22	Title: Civic Agency in AI: Democratizing Algorithmic Services in the City (CAAI) Presenter: Nitin Sawhney, Department of Computer Science
15:25	Title: Allocation of Compliance Responsibilities in the Artificial Intelligence Lifecycle Presenter: Ana Paula Gonzalez Torres, Department of Computer Science
15:28	Title: Social Processes of Algorithmic Transparency Presenter: Antti Rannisto, Department of Computer Science
15:31	Title: Motif Discovery and Visualization Presenter: Fu Chengbo , Department of Computer Science
15:34	Title: Non-separable Spatio-temporal Graph Kernels via SPDEs Presenter: Alexander Nikitin, Department of Computer Science
15:37	Title: Decision Support in Bayesian Workflow Presenter: Anna Elisabeth Riha, Department of Computer Science
15:40	Title: Speeding-up One-vs-All Training for Extreme Classification via Smart Initialization Presenter: Erik Schultheis, Department of Computer Science
15:43	Title: Vertex Connectivity in Polylogarithmic Max-Flows Presenter: Sorrachai Yingchareonthawornchai, Department of Computer Science
15:46	Title: ParliamentSampo – Finnish Parliament on the Semantic Web Presenter: Eero Hyvönen , Department of Computer Science
15:49	Title: Loudspeaker Modeling with Neural Networks Presenter: Teodors Kerimovs , Aalto Acoustics Lab
15:52	Title: Uniqueness and Safety in Eulerian Circuits Presenter: Nidia Obscura Agosta , Department of Computer Science
15:55	Title: Constellations of Correspondence: Relational Study of Large and Small Networks of Epistolary Exchange in the Grand Duchy of Finland (CoCo) Presenter: Mikko Koho , Department of Computer Science