

# CS Research Day 3 Oct



## AREA 1: presentations 1-40

1. Poster: *EAT2seq: A Generic Framework for Controlled Sentence Transformation without Task-specific Training*  
Presenter: **Tommi Gröndahl**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
2. Poster: *Amplifying IoT Honeypots with Dynamic Traffic Replay*  
Presenter: **Amit Tambe**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
3. Poster: *Detecting Organized eCommerce Fraud Using Scalable Categorical Clustering*  
Presenter: **Sebastian Szyller**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
4. Poster: *(Automatized) Trolling in Online Conversations*  
Presenter: **Henna Paakki**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
5. Poster: *Machine Learning for Industrial IoT Applications*  
Presenter: **Anton Debner**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
6. Poster: *Efficient LBS Queries with Mutual Privacy Preservation in IoV*  
Presenter: **Shushu Liu**, Department of Communications and Networking  
Location: 1<sup>st</sup> floor lobby
7. Poster: *Chameleon: Latency and Resolution Aware Task Offloading for Visual-based Assisted Driving*  
Presenter: **Chao Zhu**, Department of Communications and Networking  
Location: 1<sup>st</sup> floor lobby
8. Poster: *Beamsteering for Device-free Human Sensing*  
Presenter: **Sameera Palipana**, Department of Communications and Networking  
Location: 1<sup>st</sup> floor lobby
9. Poster: *The Case of iOS and Android: Applying System Dynamics to Digital Business Platforms*  
Presenter: **Tommi Elo**, Department of Communications and Networking  
Location: 1<sup>st</sup> floor lobby

10. Poster: *A Crowd-Sensing Platform for Real-Time Data Collection and Processing*  
Presenter: **Pontus Lundström**, Department of Communications and Networking  
Location: 1<sup>st</sup> floor lobby
11. Poster: *Radar Waveform Recognition Using Fourier-based Synchrosqueezing Transform and Convolutional Neural Network*  
Presenter: **Gyuyeol Kong**, Department of Signal Processing and Acoustics  
Location: 1<sup>st</sup> floor lobby
12. Poster: *Analog Beamforming for Active Imaging Using Sparse Arrays*  
Presenter: **Robin Rajamäki**, Department of Signal Processing and Acoustics  
Location: 1<sup>st</sup> floor lobby
13. Poster: *Automatic Waveform Classification in Multipath using Autoencoder and Synchrosqueezing Transform with CNN*  
Presenter: **Visa Koivunen**, Department of Signal Processing and Acoustics  
Location: 1<sup>st</sup> floor lobby
14. Poster: *Robust, Sparse and Scalable Inference Using Bootstrap and Variable Selection Fusion*  
Presenter: **Emadaldin Mozafari Majd**, Department of Signal Processing and Acoustics  
Location: 1<sup>st</sup> floor lobby
15. Poster: *Character-Centric Storytelling*  
Presenter: **Aditya Surikuchi**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
16. Poster: *Data Augmentation Methods for Audio Classification*  
Presenter: **Ricardo Falcon Perez**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
17. Poster: *On Robust Qualitative Configurations*  
Presenter: **Michael Sioutis**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
18. Poster: *A Provable Algorithm for Intra-cluster Max-sum Dispersion*  
Presenter: **Guangyi Zhang**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
19. Poster: *Active Learning for Decision-Making from Imbalanced Observational Data*  
Presenter: **Iiris Sundin**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
20. Poster: *Machine Teaching of Active Sequential Learners*  
Presenter: **Pedram Daei**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
21. Poster: *Embarrassingly Parallel MCMC Using Deep Invertible Transformations*  
Presenter: **Diego Mesquita**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
22. Poster: *Leave-one-out cross-validation for Large Data*  
Presenter: **Måns Magnusson**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby

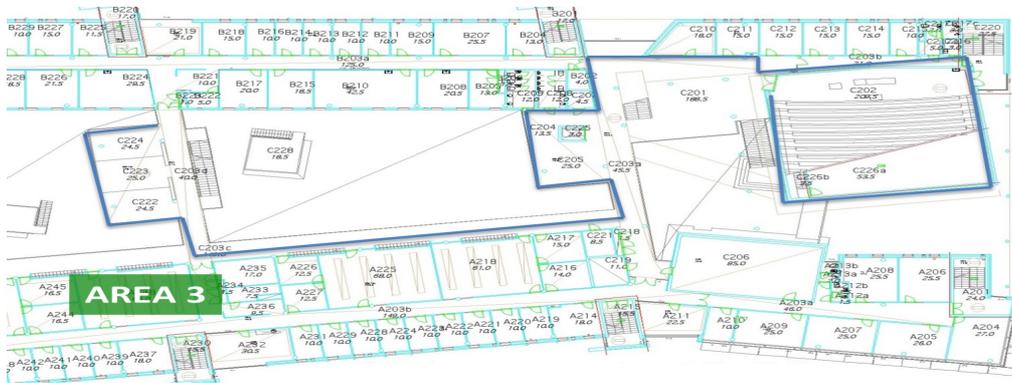
23. Poster: *ML Accelerated Spectroscopy: Molecular Excitation Spectra with Neural Networks and Beyond*  
Presenter: **Kunal Ghosh**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
24. Poster: *LuxUS: Detecting Differential DNA Methylation Using Generalized Linear Mixed Model with Spatial Correlation Structure*  
Presenter: **Viivi Halla-aho**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
25. Poster: *Deep Generative Second Order Ordinary Differential Equations*  
Presenter: **Cagatay Yildiz**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
26. Poster: *Latent Gaussian Processes with Composite Likelihoods for Data-driven Disease Stratification*  
Presenter: **Siddharth Ramchandran**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
27. Poster: *PProbabilistic Enhancer PRedictIoN Tool*  
Presenter: **Maria Osmala**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
28. Poster: *Bayesian Metabolic Flux Analysis Reveals Intracellular Flux Couplings*  
Presenter: **Maria Osmala**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
29. Poster: *Early Detection of Peripheral Blood Cell Signature in Children Developing Beta-cell Autoimmunity at a Young Age*  
Presenter: **Juhi Somani**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
30. Poster: *Modelling High-dimensional Longitudinal Omics Data with Additive Multivariate Gaussian Processes*  
Presenter: **Gleb Tikhonov**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
31. Poster: *Determining Epitope Specificity of T Cell Receptors with Gaussian Processes*  
Presenter: **Emmi Jokinen**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
32. Poster: *Nonparametric Differential Equation Systems*  
Presenter: **Henrik Mannerström**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
33. Poster: *Gaussian Process Modeling of Longitudinal Data with Interpretable Covariate Effects*  
Presenter: **Juho Timonen**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
34. Poster: *Metabolite Network Fine-tuning Using Reinforcement Learning*  
Presenter: **Maryam Sabzevari**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby

35. Poster: *Target Deconvolution to Understand Cellular Drug Responses*  
Presenter: **Tianduanyi Wang**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
36. Poster: *Liquid Chromatography Retention Order Prediction for Metabolite Identification*  
Presenter: **Eric Bach**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
37. Poster: *A Computational Framework for DNA sequencing Microscopy*  
Presenter: **Pekka Orponen**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
38. Poster: *RNA Structure Prediction: Energy Model Parameters Tuning*  
Presenter: **Mehdi Saman Booy**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
39. Poster: *Algorithmic Design of 3D Wireframe RNA Polyhedra*  
Presenter: **Antti Elonen**, Department of Computer Science  
Location: 1<sup>st</sup> floor lobby
40. Poster: *Teaching Machines to Identify Crop Loss from Space*  
Presenter: **Samantha Wittke**, Department of Built Environment  
Location: 1<sup>st</sup> floor lobby



## AREA 2: presentations 41-48

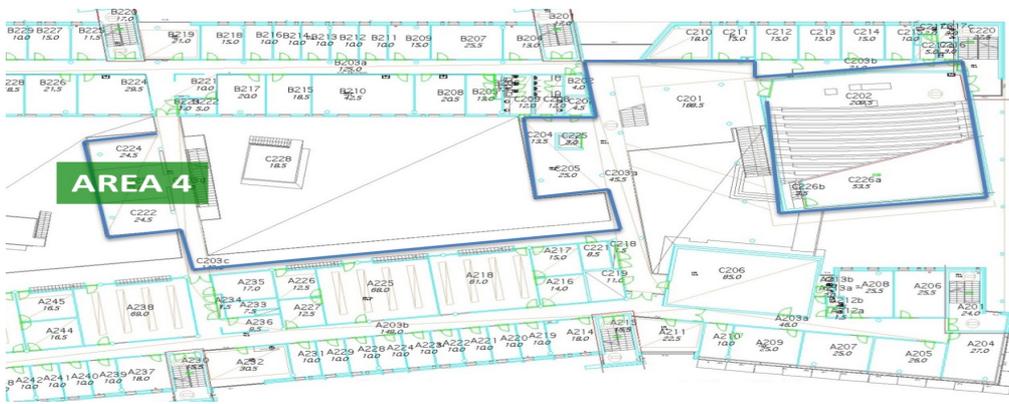
41. Demo: *Aalto Scientific Computing: CS-IT and Science-IT*  
 Presenter: **Mikko Hakala**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor lobby (T1)
42. Demo: *General IT Services*  
 Presenter: **Petri Hallikainen**, Aalto ITS  
 Location: 2<sup>nd</sup> floor lobby (T1)
43. Demo: *Open Access to Publications and Research Data and Research Data Management*  
 Presenter: **Laura Mure**, Open science and ACRIS team/Research services  
 Location: 2<sup>nd</sup> floor lobby (T1)
44. Demo: *Using Personal Data in Research*  
 Presenter: **Maria Rehbinder**, Academic Legal Services/Research services  
 Location: 2<sup>nd</sup> floor lobby (T1)
45. Demo: *Research Funding: Where to Get Money for Your Research*  
 Presenter: **Petri Kanninen**, Research services  
 Location: 2<sup>nd</sup> floor lobby (T1)
46. Demo: *Innovation Services*  
 Presenter: **Juha Siivola**, SCI Innovation Services  
 Location: 2<sup>nd</sup> floor lobby (T1)
47. Poster: *Finnish Center for Artificial Intelligence FCAI*  
 Presenter: **Kaisa Pekkala & Outi Kivekäs**, Finnish Center for Artificial Intelligence FCAI  
 Location: 1<sup>st</sup> floor lobby
48. Roll-up: *Aalto Digi Platform*  
 Presenter: **Saara Halmetoja**, Aalto Digi Platform  
 Location: 1<sup>st</sup> floor lobby



### AREA 3: presentations 49-58

49. Pitch talk: *Time-Inconsistency Bias and Human-Agent Collaboration*  
 Presenter: **Mustafa Mert Celikok**, Department of Computer Science  
 Location: Lecture room T4
50. Pitch talk: *Reconciliation k-median: Clustering with Non-polarized Representatives*  
 Presenter: **Bruno Ordozgoiti**, Department of Computer Science  
 Location: Lecture room T4
51. Pitch talk: *Towards Deep Learning with Dynamical Systems*  
 Presenter: **Markus Heinonen**, Department of Computer Science  
 Location: Lecture room T4
52. Pitch talk: *PProbabilistic Enhancer PRedictIoN Tool*  
 Presenter: **Maria Osmala**, Department of Computer Science  
 Location: Lecture room T4
53. Pitch talk: *Bayesian Metabolic Flux Analysis Reveals Intracellular Flux Couplings*  
 Presenter: **Maria Osmala**, Department of Computer Science  
 Location: Lecture room T4
54. Pitch talk: *An Unsupervised Approach to Identifying Sub-groups in Patients with Parkinson's Disease*  
 Presenter: **Siddharth Ramchandran**, Department of Computer Science  
 Location: Lecture room T4
55. Pitch talk: *ODE2VAE: Deep Generative Second-order ODEs with Bayesian Neural Networks*  
 Presenter: **Cagatay Yildiz**, Department of Computer Science  
 Location: Lecture room T4
56. Pitch talk: *Improved Precision and Recall Metric for Assessing Generative Models*  
 Presenter: **Tuomas Kynkäänniemi**, Department of Computer Science  
 Location: Lecture room T4
57. Pitch talk: *Active Learning for Decision-Making from Imbalanced Observational Data*  
 Presenter: **Iiris Sundin**, Department of Computer Science  
 Location: Lecture room T4

58. Pitch talk: *Scaling Agile to Large and Distributed Organisations*  
Presenter: **Abheeshta Putta**, Department of Computer Science  
Location: Lecture room T4



## AREA 4: presentations 59-69

59. Demo: *Interactive Exploratory Search with Probabilistic User-Intent Modelling*  
 Presenter: **Jonathan Stahrl**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
60. Demo: *Limits of Locality in Distributed Computing*  
 Presenter: **Juho Hirvonen**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
61. Demo: *Complex Systems & Networks*  
 Presenter: **Jari Saramäki**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
62. Poster: *Deep Learning with Uncertainty Estimation for Emitter Classification*  
 Presenter: **Lassi Meronen**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
63. Poster: *Know Your Boundaries: Constraining Gaussian Processes by Variational Harmonic Features*  
 Presenter: **Arno Solin**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
64. Poster: *End-to-End Probabilistic Inference for Nonstationary Audio Analysis*  
 Presenter: **William Wilkinson**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
65. Poster: *Towards Photographic Image Manipulation with Balanced Growing of Generative Autoencoders*  
 Presenter: **Ari Heljakka**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
66. Poster: *Multi-View Stereo by Temporal Nonparametric Fusion*  
 Presenter: **Yuxin Hou**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge
67. Poster: *Indoor Visual Localization*  
 Presenter: **Xiaotian Li**, Department of Computer Science  
 Location: 2<sup>nd</sup> floor bridge

68. Poster: *Inertial-Visual Odometry*

Presenter: **Santiago Cortes**, Department of Computer Science

Location: 2<sup>nd</sup> floor bridge

69. Demo: *Advances in Probabilistic Machine Learning and Computer Vision*

Presenter: **Arno Solin**, Department of Computer Science

Location: 2<sup>nd</sup> floor bridge



## AREA 5: presentations 70-77

### 70. Demo: *Cognitive Assistance Authoring Toolchain*

Presenter: **Truong An Pham**, Department of Communications and Networking

Location: 3<sup>rd</sup> floor bridge

### 71. Demo: *VR Rehabilitation for Acute-phase Stroke Patients*

Presenter: **Ilpo Härkönen**, Department of Communications and Networking

Location: 3<sup>rd</sup> floor bridge

### 72. Demo: *Self-Optimizing Web Pages*

Presenter: **Markku Laine**, Department of Communications and Networking

Location: 3<sup>rd</sup> floor bridge

### 73. Demo: *GAN Mirror*

Presenter: **Andrzej Pisarek**, Department of Computer Science

Location: 3<sup>rd</sup> floor bridge

### 74. Demo: *Vision-based Indoor Navigation for Smartphones*

Presenter: **Jiang Dong**, Department of Computer Science

Location: 3<sup>rd</sup> floor bridge

### 75. Demo & poster: *PAC it up: Towards Pointer Integrity using ARM Pointer Authentication*

Presenter: **Hans Liljestrand**, Department of Computer Science

Location: 3<sup>rd</sup> floor bridge

### 76. Demo & poster: *Making Targeted Evasion Attacks Effective and Efficient*

Presenter: **Buse Atli**, Department of Computer Science

Location: 3<sup>rd</sup> floor bridge

### 77. Demo: *Secure Bootstrapping on Contiki with EAP-NOOB*

Presenter: **Alexi Peltonen**, department of Computer Science

Location: 3<sup>rd</sup> floor bridge