

7.3 Master Theses

1. T. Sormunen, *Pallet Detection in Warehouse Environment*, Aalto U., in progress.
2. T. Rahman, *Deep Learning based Intrusion Detection System*, Aalto U., in progress.
3. R. Tikkanen, *Machine learning for Fitness Tracker Data Integration*, industry: <https://fjuul.com/>, Aalto U., in progress.
4. T. Gyabaah, *Machine Learning for Art Fraud Detection*, industry: <https://www.blankt.com/>, Aalto U., July, 2022.
5. J. Lillfors, *Networked Federated Learning*, Aalto U., July, 2022.
6. A. C. Barcsa-Szabo, *Feature-based Approaches for Ethical News Personalization*, industry: Sanoma Media Finland, Aalto U., July, 2022.
7. C. Molinero Ranera, *Multi-label classification of a hydraulic system using Machine Learning*, Aalto U., July, 2022.
8. V. Petrutiu, *Exploring Transformers and Degradation Methods in the Super Resolution Field*, industry: Huawei, Aalto U., July, 2022.
9. P. Truong, *Crown-of-Thorns Starfish detection by state-of-the-art YOLOv5*, Aalto U., July, 2022.
10. Y. Huang, *Text analysis of novel coronavirus pneumonia based on federal deep learning*, Aalto U., June, 2022. <https://aaltodoc.aalto.fi/handle/123456789/115546>
11. C. Ozen, *A collaborative approach for large-scale Electricity consumption using Federated Learning*, Aalto U., June, 2022. <https://aaltodoc.aalto.fi/handle/123456789/115282>
12. P. Prinsen, *Robust Gas pressure control using Neural Networks*, industry: Wärtsilä Finland Oy, Aalto U., Jan., 2022. <https://aaltodoc.aalto.fi/handle/123456789/112627>
13. E. Hattula, *Transfer Learning Technology for Building Extraction from Orthophotos and Open-Source Data*, industry: National Land Survey of Finland (<https://www.maanmittauslaitos.fi/en>), Aalto U., Jan., 2022. <https://aaltodoc.aalto.fi/handle/123456789/112450>
14. A. Channabasaiah, *Applying machine learning methods to predict taxi pickups using historical taxi data*, Aalto U., Jan., 2022. <https://aaltodoc.aalto.fi/handle/123456789/112871>
15. R. Hellström, *Aspect Based Sentiment Analysis in Finnish*, industry: Crowst Oy, Aalto U., Jan., 2022. <https://aaltodoc.aalto.fi/handle/123456789/112857>
16. M. Leinonen, *Federated Multi-task Learning over Networked Data*, Aalto U., June, 2021. <https://aaltodoc.aalto.fi/handle/123456789/108261>
17. M. Uutaniemi, *Extraction of labeled fields from images of structured documents*, Aalto U., Aug., 2021. <https://aaltodoc.aalto.fi/handle/123456789/109305>
18. A. Orre, *Pedestrian movement analysis from drone perspective*, Aalto U., Dec., 2021. <https://aaltodoc.aalto.fi/handle/123456789/111730>
19. P. Vijayakrishnan, *Semi-supervised machine learning techniques for infant motility classification*, Aalto U., Oct., 2021. <https://aaltodoc.aalto.fi/handle/123456789/110565>
20. J. Seppälä, *Application of machine learning to link click predictions in Facebook Family of Apps advertising*, Aalto U., 2021. <https://aaltodoc.aalto.fi/handle/123456789/106829>

21. K. Kutlu, *Machine Learning based Chaos Engineering for Cloud-Native Microservice Architectures*, industry: Ericsson, Aalto U., Aug., 2021. <https://aaltodoc.aalto.fi/handle/123456789/109355>
22. K. Ariko, *Increasing the safety in the proximity of the mobile working machines: a study of detecting people*, industry: Epec Oy, Aalto U., Oct., 2021. <https://aaltodoc.aalto.fi/handle/123456789/110498>
23. M. Afteniy, *Predicting time series with Transformer*, Aalto U., May, 2021. <https://aaltodoc.aalto.fi/handle/123456789/107662>
24. Z. Mohammadi, *Better Utilization of Relational Data in Machine Learning*, industry: Lamia Oy, Aalto U., May, 2021. <https://aaltodoc.aalto.fi/handle/123456789/107604>
25. T. Nguyen, *Applying Machine Learning to Develop Black-box Control Model of Active Double-Skin Facade*, Aalto U., Jan., 2021. co-supervised with Prof. H. Ihasalo, <https://aaltodoc.aalto.fi/handle/123456789/102547>
26. P. Pyrrö, *AIR: Aerial Inspection RetinaNet for Land Search and Rescue Missions*, industry: Accenture, Aalto U., Jan., 2021, <https://aaltodoc.aalto.fi/handle/123456789/112856>
27. T. Kokkonen, *Classifying Restaurant Menu Items With Supervised Learning*, Aalto U., Jan., 2021. <https://aaltodoc.aalto.fi/handle/123456789/102433>
28. C. Dikmen, *Application of Contextual Bandits Models in a Supervised Learning Setting*, Aalto U., Aug., 2020. <https://aaltodoc.aalto.fi/handle/123456789/46314>
29. J. Laiho, *Recognizing Thoughts from Bioelectric Patterns? A Brain-Computer Interface with Deep Learning*, industry: Accenture Liquid Studio (NL), Aalto U., Aug., 2020. <https://aaltodoc.aalto.fi/handle/123456789/46105>
30. X. Zhang, *Diagnostic and Prognostic Analysis Optimization of Field Problems for EV Charging Stations*, industry: ABB, Aalto U., Aug., 2020. <https://aaltodoc.aalto.fi/handle/123456789/46045>
31. T. Hämäläinen, *Clustering IoT devices for network intrusion detection systems*, industry: Ericsson, Aalto U., May, 2020. <https://aaltodoc.aalto.fi/handle/123456789/44266>
32. T. Valentijn, *The Practical Applicability of a CNN for Automated Building Damage Assessment*, industry: Red Cross NL (<https://www.510.global/>), Aalto U., June, 2020. co-supervised with Dr. Jorma Laaksonen, <https://aaltodoc.aalto.fi/handle/123456789/44991>
33. J. Nieminen, *Framework for application of machine learning algorithms in telecommunications*, industry: Nokia Oyj, Aalto U., Mar., 2020. <https://aaltodoc.aalto.fi/handle/123456789/43572>
34. M. Mishin, *Anomaly Detection Algorithms and Techniques for Network Intrusion Detection Systems*, industry: Ericsson, Aalto U., Aug., 2020. <https://aaltodoc.aalto.fi/handle/123456789/46076>
35. D. Tokmurzina, *Road marking condition monitoring and classification using deep learning for city of Helsinki*, Aalto U., Oct., 2020. <https://aaltodoc.aalto.fi/handle/123456789/47388>
36. I. Vikström, *Deep reinforcement learning approach for HVAC control*, industry: TietoEVRY Oyj, Aalto U., Dec., 2020. <https://aaltodoc.aalto.fi/handle/123456789/97613>
37. K. Klemets, *Forecasting Hourly Parking Occupancy with Multiple Seasonalities*, industry: City of Helsinki, Aalto U., Aug., 2020. <https://aaltodoc.aalto.fi/handle/123456789/45990>

38. J. Moisala, *Optimizing the mark-up of foreign exchange derivative contracts using machine learning*, Aalto U., May, 2020. <https://aaltodoc.aalto.fi/handle/123456789/44353>
39. L. Kolehmainen, *A web scraping system for extracting news articles*, industry: Vainu Finland Oy, Aalto U., Dec., 2019. <https://aaltodoc.aalto.fi/handle/123456789/41693>
40. T. Wiro, *Market influence on purchase prices in procurement*, industry: Sievo, Aalto U., June, 2019. <https://aaltodoc.aalto.fi/handle/123456789/39059>
41. J. Eskonen, *Deep Reinforcement Learning in Automated User Interface Testing*, industry: Ericsson, Aalto U., May, 2019. <https://aaltodoc.aalto.fi/handle/123456789/37895>
42. A. Moskalev, *Demand forecasting for fast-moving products in grocery retail*, industry: Relex, Aalto U., May, 2019, <https://aaltodoc.aalto.fi/handle/123456789/37915>
43. D. Baad, *Automatic Job Skill Taxonomy Generation For Recruitment Systems*, industry: VXT Research Oy, Aalto U., June, 2019. <https://aaltodoc.aalto.fi/handle/123456789/38986>
44. K. Karapetyan, *Process Mining of Automation Services with Long Short-Term Memory Neural Networks*, industry: Posti Group Oyj, Aalto U., March, 2019. <https://aaltodoc.aalto.fi/handle/123456789/37178>
45. J. Kahles, *Applying Machine Learning to Root Cause Analysis in Agile CI/CD Software Testing Environments*, industry: Ericsson, Aalto U., Jan., 2019. <https://aaltodoc.aalto.fi/handle/123456789/36347>
46. H. Ambos, *Semi-Supervised Learning over Complex Networks*, Aalto U., Mar., 2019. <https://aaltodoc.aalto.fi/handle/123456789/37130>
47. M. Torres Porta, *Anti-Money Laundering system based on customer behavior*, Aalto U., Aug., 2019. <https://aaltodoc.aalto.fi/handle/123456789/39938>
48. A. Shehata, *Cellular Network Average User Throughput-Downlink Prediction by Machine Learning*, industry: Nokia, Aalto U., Dec., 2018. <https://aaltodoc.aalto.fi/handle/123456789/35471>
49. O. Abramenko, *Graph signal sampling via reinforcement learning*, Aalto U., Nov., 2018. <https://aaltodoc.aalto.fi/handle/123456789/34750>
50. M.O. Nasir, *Supervised Learning in Lighting Control Systems*, Aalto U., Oct., 2018. <https://aaltodoc.aalto.fi/handle/123456789/34394>
51. D. Wu, *Unsupervised Learning for Lighting Control System*, industry: Helvar Oy, Aalto U., Oct., 2018. <https://aaltodoc.aalto.fi/handle/123456789/34384>
52. N. Pokhrel, *Drone Obstacle Avoidance and Navigation Using Artificial Intelligence*, industry: Nokia, Aalto U., May, 2018. <https://aaltodoc.aalto.fi/handle/123456789/31561>
53. D. Koskeniemi, *Do financial networks improve the explanatory power of the Fama-French factors? A comparison of propagation algorithms on stock market returns*, Aalto U., March, 2018. <https://aaltodoc.aalto.fi/handle/123456789/30542>
54. S.B. Jahromi, *Compressed Sensing for Big Data Over Complex Networks*, Aalto U., Jan., 2018. <https://aaltodoc.aalto.fi/handle/123456789/29671>
55. A. Mara, *A Comparative Analysis of Graph Signal Recovery Methods for Big Data Networks*, Aalto U., Oct., 2017. <https://aaltodoc.aalto.fi/handle/123456789/28567>
56. Y. Gao, *Graphical Model Selection in Big Data Application*, Aalto University, Dec., 2016. <https://aaltodoc.aalto.fi/handle/123456789/23908>

57. B. Kausl, *Channel aware inference based on the Fisher information*, TU Vienna, 2012. co-supervised with Prof. Franz Hlawatsch,, <http://hdl.handle.net/20.500.12708/8885>