Aalto University
School of Electrical Engineering

ELEC-E0110 Academic Skills in Master's Studies
Spring semester 2021

This is an optional reference list of completed thesis for the thesis review assignment. The theses listed below have been graded 5 during 2019 and 2020. According to the thesis statements, they are well-structured and well-written theses with either substantial scientific results or with a solid solution to the research problem through a mature research process. You can take one of these or search any other thesis in the Aaltodocs archive that matches your interest. You can search the below thesis with the title in the Aaltodocs archive. Some of the thesis listed here might not be available as full text thesis. Those thesis are only accessible from certain customer computers at the library on campus.

If you want to know more about how the evaluation criteria is applied eg. for grade 5, discuss with your mentor or later with your thesis supervisor.

Master's Programme in Electronics and Nanotechnology

Phase noise compensation via inter-satellite link for bistatic radar interferometry

Selective area growth of indium arsenide in-plane nanowires

Integrated Circuit Blocks for In-Memory Computing (online)

Distributed beamsteering at millimeter waves for imaging and localization (online)

Thermal characterization of III-V semiconductor core-shell nanowire

Optical thermometry for determining the refractive index of air (online)

Frequency-reconfigurable 8 x 8 MIMO handset utilizing combinatory feeding (online)

Auroral substorm observations since 1914: latitudinal distribution and energetics (online)

Synthetic Aperture Radar image stacks in support of situational awareness (online)

Master's Programme in Computer, Communication and Information Sciences

Techno-Economic Analysis of Wireless Connectivity Options in a University Campus

Neural Network Decoders for 5G Physical Uplink Shared Channel Control Information (online)

State-Space Virtual Analogue Modelling of Audio Circuits (online)

Reinforcement Learning Methods for Radar Resource Management

Radar Waveform Synthesis Using Generative Adversarial Networks

Multichannel coherent receiver on the RTL-SDR (online)

Significance of Patterns in Data Visualisations (online)

Signal Processing in a Semi-Automatic Piano Tuning System (online)

Effectiveness of Mobility Robustness Optimisation in a Live LTE Network

Techno-Economic Analysis of Smart Home Hub and Integration Service (online)

Extending the Functionality of the Realm Gateway (online)

Enabling Edge Computing Using Container Orchestration and Software Defined Networking (online)

SphereDiar - an efficient speaker diarization system for meeting data (online)

Prediction of Patient Deterioration in the Emergency Department using Recurrent Neural Networks

Master's Programme in Automation and Electrical Engineering

Electrical Power and Energy Engineering

Identifying suitable onshore utility-scale greenfield wind park locations in Finland based on a spatial analysis and optimising site selection using the Analytic Hierarchy Process (online)

Power System Stability in High Renewable Share Grids (online)

Aggregated Demand Response in a Virtual Power Plant: A Finnish Case Study (online)

Hajautetun suuntaajakytketyn tuotannon mallintaminen (online)

Rotor Bar Fault Detection in Induction Machines

Single-point solar energy systems for low power weather instruments

Electric vehicle charging combined with load management in commercial buildings (online)

Suojautuminen sähköverkon häiriön aiheuttamalta vaihekatkokselta Loviisan voimalaitoksella

Output Admittance of a Power Converter (online)

Kolmitasoisen vaihtosuuntaajan tehoasteen simulaatiomallin kehitys

Kantaverkon relesuojauksen toiminta suurhäiriön jälkeisessä käytönpalautuksessa

Control, Robotics and Autonomous Systems

A hardware and software platform for characterization and prototyping of a low-power energy-harvesting SoC (online)

Evaluation of Container Technologies for an Embedded Linux Device (online)

Sensor Fusion for Localization of Automated Guided Vehicles (online)

Simulating data center cooling systems: data-driven and physical modeling methods (online)

On Robustness and Smoothness of Optimized Pulse Patterns for Power Conversion Systems

Visual-Inertial Odometry Aided Temporal Camera Relocalization

Development of insect production automation: Automated processes for the production of Black Soldier Fly (Hermetia illucens) (online)

Model-Based Reinforcement Learning from Pixels (online)

Evaluation of physics engines in context of manufacturing simulations

Autonomous formation of user-specified patterns on a Chladni plate

Camera-Based Egomotion in a Self-Driving Car (online)

Next Generation Task Controller for Agricultural Machinery using OPC Unified Architecture (online)

Systemaattiset menetelmät hissiryhmien vyöhyköintivaihtoehtojen analysointiin monikerroksisissa rakennuksissa