**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 either 4 or 5 during 2018. 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.

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

An improved channel model for medical body area network device testing

Simulations and measurements of GaAs-based photoelectrochemical cells

Time-to-Digital Converter for Wideband Time-Based Analog-to-Digital Converters

Voltage-to-Time Converter for High-Speed Time-Based Analog-to-Digital Converters

Switch-based frequency-reconfigurable MIMO antennas for handsets

Single-photon emission from strained two-dimensional transition metal dichalcogenides

Automated functional system integration testing of Suomi 100 satellite

Development of ECG and EMG platform with IMU to eliminate the motion artifacts found in measurements

Decoupling and matching network for a MIMO handset antenna

Invisible Cavity Resonators

Master's Programme in Computer, Communication and Information Sciences

Enhancing Trust and Resource Allocation in Telecommunications Cloud

Spatial analysis of sound field for parametric sound reproduction with sparse microphone arrays

Time-Scale Modification of Audio and Speech Signals

Localisation of Virtual Sound Sources by Bilateral Cochlear Implant Users

Black-Box Modelling of Nonlinear Audio Circuits

Mobile Network User Plane Switching Using Linux

A Planning and Optimization Framework for Hybrid Ultra-Dense Network Topologies

Organizational silos at the workplace of an ICT service provider

Resource Management in Container-based Mobile Edge Computing

Security Policy Management for a Cooperative Firewall

Monitoring the Computational Resource Utilization of VNFs In Telecommunication Cloud

Data access performance impact of a memory-centric radio network

Wi-Fi QoS improvements for industrial automation

Strong Electronic Identification: Survey & Scenario Planning

Master's Programme in Automation and Electrical Engineering

Tranlational Engineering

Optimal Mid-Infrared Photon Detectors for Use with Voltage-Tunable Filters in Gas Sensing Applications

In situ temperature measurement in hazardous environment

Reaaliaikaisen anturidatan yhdistäminen rakennuksen tietomalliin

Electrical Power and Energy Engineering

Design and Calibration of Water-Cooled Calorimeter for Induction Motors

Lightning Induced Over-voltages in Nuclear Power Plants

Probabilistic temperature estimation for a photovoltaic inverter

Yliaallot ja niiden vaikutus Carunan verkkoon

Nesteytetyn maakaasun höyrystyslaitoksen turvallisuusvaatimukset ja mikroturbiinin hyödyntäminen höyrystysprosessissa

Accelerated ageing and prognostics of silicon carbide power MOSFET

System Impedance Measurement with a Three-Phase Converter

Field Weakening Control of Interior Permanent Magnet Synchronous Motor Employing Model Order Reduction

Design and optimization of a magnet pole for Magnetic Resonant Imaging

Sähköurakan toiminta-tapojen kehittäminen eri toimijoiden näkökulmasta haastattelututkimuksen avulla

Stochastic Assessment of Voltage Unbalance Mitigation by Battery System in case of Single-Phase Solar Generation

Precise and Reliable Time Distribution in the Power Transmission System

Control, Robotics and Autonomous Systems

Developing a Soldering Robot for High-mix Low-volume Electronics Production

Multi-modal extended target tracking for autonomous vehicles

Inferring Depth Maps from 2-Dimensional Laser Ranging Data in a Simulated Environment

Laboratorionäyteputken ominaisuuksien tunnistus konenäöllä

Sea Ice Field Analysis Using Machine Vision

Learning Search Strategies from Human Demonstration for Robotic Assembly Tasks

Transfer of reinforcement learning for a robotic skill

Surfactant detecting wireless sensor cloud

Condition-based maintenance of air handling units

Motion-based extrinsic parameter calibration of a robot's multisensor system

Do financial networks improve the explanatory power of the Fama-French factors? – A comparison of propagation algorithms on stock market returns

Modelling Bacterial Growth for Applying Photodynamic Therapy with Indocyanine Green

Enabling Continuous Integration through deployment automation Case Study: Property transaction system of Finnish National Land Survey

Mapping Modbus to OPC Unified Architecture