

13.5.2025

## **EDUCATION**

- 2004 – 2008      **Engineer**, Electronics, JAMK University of Applied Sciences
- 2003 – 2004      **Non-commissioned officer of electronics**, Army School of Communication and Electrical Engineering, Riihimäki
- 2000 – 2003      **Basic electrician degree**, AMISTO Porvoo – Loviisa unit, Loviisa
- 1998 – 2000      **High school**, Porlammi High school, Lapinjärvi (dropped out)
- 1989 – 1998      **Primary and secondary school**, Porlammi, Lapinjärvi

## **WORK EXPERIENCE**

- 2/2019 -            **Senior R&D engineer**, OPhi Technologies Oy, Lahti
- Electrical and automation design, PLC programming, HMI programming
    - o Ship-automation
    - o Electric ferry DC-charger, 4MW
    - o Frequency converters
    - o Biogas treatment container (CHP) control automation
    - o Small scale (30kW) hydroturbine power generation and gate control automation
    - o Battery management
    - o Manufacturing automation
  - Commissioning
  - Service
- 10/2012 – 11/2018    **Design Engineer**, Nocart Oy, Lahti
- Design and product development of a power generation control system
    - o Frequency controller (small wind turbines, wood gas, hydro, biogas, steam, diesel)
    - o DC (solar, batteries)
    - o Management of electricity purchase and sale, energy balance and battery management
    - o Microgrids
    - o MPPT-controller
  - Electrical and automation design, PLC programming
    - o Factory automation
    - o Manufacturing automation, packing line
    - o Flying shear
    - o Ship propulsion control lever software design
    - o Ship power plant control system retrofit update

- Commissioning (electrical testing, functional testing, troubleshooting)
  - Technical support
  - User interface design
  - Technical sales
  - Project management
  - Component sourcing
  - Freight + customs
- 3-9/2012      **Design Engineer**, Nocart Oy, Lahti (preparation for working life)
- Automation PLC programming
  - PLC and frequency converter programming, user interface design
  - Electrical, assembly, layout, cabinet and automation design
  - Commissioning (wiring work, testing, functional testing)
- 4/2009 - 12/2011      **Project-/electrical engineer**, Cypress Wind Turbines Oy, Helsinki
- Product development
  - Electrical, assembly and layout design of control systems for small wind turbines
  - Component sourcing
  - Assembly, testing and electrical installation of control cabinets
  - Electrical installation work on buildings
  - Mast work / high altitude work
  - Equipment maintenance, documentation, and technical support
  - LabView programming, measurement implementation, and analysis of measurement systems
  - PLC and frequency converter software development
  - LAN upkeep and technical support
- 6-12/2008      **Project assistant**, Jyväskylä University of Applied Sciences Ltd, Jyväskylä
- Robot cell programming for the Technology 2008 trade fair (Mitsubishi RV-2AJ robot, DVT Intellect machine vision, and Beijer E-1032 Operator panel)
  - Exhibitor at the Technology 2008 trade fair
  - Planning and supervising the laboratory exercises of the Basics of Measurement Technology course
  - Reflow oven temperature controller design
- 5-8/2007      **Electrician**, Borealis Polymers Oy, Porvoo
- Industry electrician's tasks (installation, removal and connection work, commissioning inspection)
- 5-8/2006      **Automation trainee**, Borealis Polymers Oy, Porvoo
- MetsoDNA automation system image updates
  - Development of a backup system
  - Creating an Aspentech Trends and Management Page
  - Development of MS Access database and modification of two databases
- 5-8/2005      **Automation trainee**, Borealis Polymers Oy, Porvoo
- 2-6/2004      **Mechanic**, Upinniemi garrison repair shop and minelayer ship Pohjanmaa, Upinniemi (training during military service)

9-10/2002	<b>Mechanic</b> , LPO – Loviisa telephone, Loviisa (the-job learning)
6-8/2002	<b>Mechanic</b> , Borealis Polymers Oy, Porvoo
6-8/2001	<b>Mechanic</b> , Borealis Polymers Oy, Porvoo
6-8/2000	<b>Mechanic</b> , Borealis Polymers Oy, Porvoo
7/1998	<b>Mechanic</b> , Borealis Polymers Oy, Porvoo
6-7/1997	<b>Helper</b> , Sihvola farm, Porlammi

## **COURSES / OTHER TRAINING**

9/2023	First aid EA-1 (exp. 14.9.2026)
6/2017	Occupational safety card (exp. 8/2028)
6/2017	Electrical safety training SFS 6002 (exp. 8/2028)
8/2022	Drone A1/A3 open sub category (exp. 9.8.2027)
10/2020	Waste sorting training by PHJ Ltd
10/2018	Mental health first aid 1
5/2016	Voluntary rescue search and communication courses
1999 – 2008	FICORA modules K, T1, and T2 for amateur radio examination (general HAREC qualification)

## **MULTILINGUAL**

Finnish	Native
English	Good

## **LANGUAGE TRAINING**

2006	Study tour, Singapore, 2 kk
2003	Internship, Austria, Graz, 1 kk
1999	Language journey, Great Britain, Brighton, 1 kk

## **BUSINESS TRIPS ABROAD**

Over the years, I have taken business trips to Nepal, Kenya, Estonia, Russia, Denmark, the United Kingdom, and Germany.

## WORK TRAVELING

In the busiest years, domestic and international travel days have accumulated to approximately 90-140/year.

## PROFESSIONAL TOOLS

ABB Automation Builder (Codesys v2) – Good knowledge  
Beckhoff TwinCAT – Basic knowledge  
CADS Planner 18 – Basic knowledge  
Siemen TIA 16/17/19 - Basic knowledge  
Wago e!cockpit – Basic knowledge

## INDUSTRIAL EQUIPMENT

Energy metering: Accuenergy AcuDC 243, Schneider Electric iEM 3255, Socomec Diris A10, A20, A40  
Programmable Logic Controllers: ABB AC500 -sarjan logiikat, Beckhoff CX9020, Wago PF200, Siemens 1510/1512  
HMI's: ABB CP600-series, Phoenix contact TPM 3105, Siemens Unified and comfort panels  
Frequency converters: ABB: ACS800, ACS880, ACSM1, Danfoss (Visedo): PowerMaster, VSG, Siemens: G120  
Batteries: Toshiba SCiB, Léchlance  
Fieldbuses: Modbus RTU, Modbus TCP/IP, CAN, CANopen, J1939, Profinet IO, EtherCAT

## HOBBIES

Movies/home theater/hi-fi, violin playing, violin building, home network setup, electronics repair/building/modification, photography, videography, video editing, blogging, LEGO collecting and restoring.

## TRUST

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|--------------------------------------|--|
| 3/2024 – Present                     | Member of the board of the Päijät-Häme Signals guild ry (Päijät-Hämeen viestikilta ry)                                 |
| 2/2021 – Present                     | Member of the board of the Pirate Party Päijät-Häme District Association ry (Piraattipuolueen Hämeen piiriyhdistys ry) |
| 6/2020 – Present                     | Chariman of the Asunto Oy Kilpiäistenportti  |
| 10/2017 – 2021                       | Palkkatyön puolesta ry's (For pard work association ry) operations inspector   |
| 5/2010 – 8/2014,<br>6/2016 – 11/2019 | Member of the board of the Piraattipuolue r.p (Pirate Party r.p.)  |
| 6/2016 – 11/2018                     | Nocart Oy's health and safety representative   |

4/2016 – 5/2020	Member of the board of the Asunto Oy Kilpiäistenportti
5/2008 – 5/2010, 8/2014 – 6/2016	Deputy board member of the Piraattipuolue r.p (Pirate Party r.p.)
4/2014 – Present	Deputy board member of the 1 Degree Consulting Oy
2013 – 2016	Deputy member of the Lahti Central Election Commission
2012	Chairman of the Helsinki District Electoral Commission 49A during Presidential elections 2012, 1st and 2nd round
6/2011 – 12/2011	Cypress Wind Turbines Oy 's shop steward and occupational health and safety representative
2011	Member of the Helsinki District Electoral Committee 33F during Parliamentary elections 2011
4/2009 – 4/2012	Piraattipuolue r.p 's (Pirate Party r.p.) support product trade manager
5/2008 – 12/2023	Treasurer of the Piraattipuolue r.p (Pirate Party r.p.)
10/2007 – 12/2008	Chairman of the residents' committee of Lehtorannantie 6 of Jyväskylän vuokra-asunnot Oy (Jyväskylä rental apartments Oy)
9/2006 – 12/2008	Student representative of the Quality Council of Jyväskylä University of Applied Sciences
1/2006 – 12/2006	Member of the Cooperation Council of the Residents' Committees of the Central Finland Student Housing Foundation (Ainolankaari 2)
9/2005 – 5/2006	Student coordinator of the FLEX06 project
9/2004 – 5/2007	Contact person of the Jyväskylä Association of Engineering Students
3/2003 – 3/2004	Member of the Board of the Porvoon radioharrastajat ry (Porvoo radio enthusiast association ry)