

English Version – Tuomas Lehto CV

Tuomas Lehto

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Professional Summary

Adaptable and technically skilled Robotics and AI engineering student with hands-on experience in automation, AI, Linux systems, and hardware integration. Demonstrated ability to design, implement, and troubleshoot real-world technical solutions, including multimodal AI assistants, automated computer vision systems, and custom Linux deployments. Recognized for problem-solving, self-directed learning, and delivering practical, production-level results. Seeking roles in robotics, automation, AI, or software engineering where technical expertise and hands-on problem solving are valued.

Education

Bachelor of Engineering in Robotics and Artificial Intelligence

South-Eastern Finland University of Applied Sciences (Xamk) • 2020 – Present

- 5th-year student specializing in industrial robotics, automation, and applied AI

Vocational Qualification in Information and Communication Technology

Keuda Vocational College, Kerava • 2017 – 2020

- Specialization: Software Development

Professional Certificate

- UiPath Certified RPA Developer – Software / Office Automation

Technical Skills

Programming & Scripting: Python, C++, C#, Kotlin, PHP, JavaScript, MySQL, HTML, CSS, Bash

Industrial & Robotics: OPC UA, Siemens TIA Portal, Visual Components, FluidWorks, PLC systems, Arduino

AI & Computer Vision: YOLO, OCR, PyTorch, LangChain, LLaMA 3, ChromaDB, STT/TTS, model optimization

CAD & Simulation: Autodesk Inventor, FEM analysis, Nastran simulation, 3D printing

Linux & Systems: Arch Linux installation and configuration, package/service management, driver installation, Docker, Python virtual environments, system

optimization for ML workloads

Hardware & PC Building: Custom PC assembly and maintenance since age 12,
hardware troubleshooting, performance optimization

Tools & Platforms: Git, Blender, Unity, TIA Portal

Projects

Multimodal Voice-Activated Personal Assistant AI (2025)

- Fully voice-driven multimodal assistant integrating vision, speech, and reasoning
- Technologies: YOLO, OCR, STT/TTS, LangChain, ChromaDB, LLaMA 3
- Modular, locally deployable architecture designed for real-world usability and extensibility

Automated Computer Vision QA Cell – Lumon Oy (Client Project / Academic-Industrial Collaboration)

- Designed and implemented a fully automated computer vision system for glass panel quality inspection
- Used Cognex cameras with specialized camera settings and LED edge lighting
- Solved multiple technical challenges in system design and workflow logic
- Delivered a working demo to Lumon management

Custom GPT and Tokenizer (2025)

- Built transformer-based GPT in PyTorch from scratch with 15 MB corpus
- Implemented full transformer architecture, training loop, and small-scale optimization

Automated Linux / Device Setup & Troubleshooting Projects (2025)

- Installed and configured Arch Linux on convertible hardware
- Configured drivers, services, Docker, and optimized system for AI/ML workloads

Welding Robot Programming Demo (Delfoi Robotics OLP / Visual Components) (2025)

- Programmed welding robot using Finnish Delfoi Robotics offline programming plugin in Visual Components
- Created complete simulation for weld paths, timing, and collision avoidance
- Produced a demo video showcasing program and workflow logic
- Highlights practical experience in industrial robotics and robot programming simulation

Web Development Portfolio

- Small- and medium-sized web projects using HTML, CSS, JavaScript, PHP, and MySQL
- Demonstrates progressive skill development, UI/UX understanding, and responsive design

Elden Ring Modding (2023)

- Modded game assets and mechanics to explore engine structure and scripting

Professional Experience

Construction Worker / Fire Watcher • Bolt Works Oy • Jun – Aug 2025

- Assisted in construction and renovation; occasional firewatch duties during welding/high-risk operations

Production Line Operator • Aidon Oy • Jan 2023 – Aug 2023

- Operated production line, ensured assembly accuracy, testing, and traceability

General Worker • Eezy Oy • Jan 2022 – Aug 2022

- Completed short-term assignments including moving (Martela, Muuttohaukat), logistics, and firewatch

Construction Worker • Bolt Works Oy • Aug 2021

- General labor support for a short-term construction project

IT / Software Support Trainee • Keuda Vocational College • Feb – Mar 2020

- Provided technical support for elderly users
- Gained experience in hardware/software troubleshooting and system configuration

Volunteer / Additional Experience

Volunteer IT / Hardware Support

- Provided hardware and software support for friends, family, and non-professional clients over several years
- Built and maintained custom PCs, optimized systems for performance and reliability

- Diagnosed and resolved technical issues including troubleshooting, system upgrades, and component replacements

Languages

- Finnish – Native
- English – Fluent (technical proficiency)

Soft Skills

- Analytical thinking & problem solving
- Self-directed learning & adaptability
- Communication & teamwork in diverse environments
- Safety awareness & attention to detail
- Task prioritization & time management