



Miika Elo Juhani Lehtimäki

CONTACT INFORMATION

Ruutikatu 8 B 58
02650 Espoo

+358 400 588508
miika.lehtimaki@gmail.com
<https://github.com/Lehdari>

EDUCATION

Aalto University School of Electrical Engineering 2019 - 2021

M.Sc. (Tech.) Translational Engineering

Master's thesis: "Road detection in adversarial weather conditions using RGB and LiDAR data", grade 4/5

Aalto University School of Electrical Engineering 2013 - 2019

B.Sc. (Tech.) Automation and Information Technology

Bachelors thesis: "GPU accelerated visual analytics tool for people flow tracking data", grade 3/5

Vaasan Lyseon Lukio, Vaasa 2012

ADDITIONAL EXPERIENCE

Varjo Technologies Oy

Machine Learning Engineer

01/2022 - 01/2024

- 3D reconstruction refinement/infilling using generative AI
 - Tools: Gaussian Splatting, Stable Diffusion, Python, PyTorch
- Prototype for dynamic content detection from RGBD video
 - Tools: C++, OpenCV, Convolutional Neural Networks
- Research on stereographic depth estimation methods
 - Tools: Python, PyTorch, AWS, NeRF
- Integration of computer vision models on NVIDIA Jetson hardware
 - Tools: C++, TensorRT, Conan, CMake

Sensible 4 Oy

Senior Autonomous Vehicle Engineer, Research & Innovation

09/2021 - 12/2021

- Research focus, implementation of PoC prototypes according to latest research on the field

Master's Thesis Worker

06/2020 - 08/2021

- Road surface segmentation with convolutional neural networks in bird's eye view
- Dataset tool for accelerating the annotation process
- Novel 3D point cloud manipulation methods

Tools/Methods: C++, ROS, Eigen, OpenGL, Python, Keras, CNN, U-Net	
CubiCasa Oy	
Software Developer	05/2019 - 08/2019
- RGBD Dataset augmentation by voxel distance field reconstruction - Tools: C++, OpenCV, Eigen	
Aalto University	
Course Assistant, C++ Programming	09/2018 - 12/2018
CubiCasa Oy	
Machine Learning Developer	01/2018 - 08/2018
- Depth and label prediction from RGB video using convolutional neural networks - Kinect V1 dataset augmentation: normals, planes, camera trajectory - Video to point cloud processing pipeline design and optimization - Tools: C++, Python, Keras	
Suhina Solutions Oy	
Machine Learning Developer	09/2017 - 12/2017
- Creating pilot project for CubiCasa Oy: depth prediction from RGB indoor images using convolutional neural networks. - Tools: Python, Keras	
KONE Oyj	
Software Engineer Trainee	06/2017 - 09/2017
- Planning architecture and roadmap for real-time heatmap visual analytics software and implementation of computation/visualization library - Tools: Microsoft Windows 7, C++, OpenGL, Qt	
Aalto University	
Course Assistant, Basic Course in C programming	01/2017 - 05/2017
Course Assistant, C++ Programming	09/2016 - 11/2016
KONE Oyj	
Software Engineer Trainee	06/2016 - 09/2016
- Designing and implementing a simulation log parser and statistics computation library - Tools: Microsoft Windows 7, C++	
Huawei Technologies Co. Ltd. (Finland), R&D Center	
Software Engineer Trainee	08/2015 - 12/2015
- Designing and implementing elements of an UI toolkit - Tools: Android, C++, GLES	
Summer Trainee	06/2014 - 07/2014

POSITIONS OF RESPONSIBILITIES	Member of board, Guild of Automation and systems technology	2016
PROGRAMMING LANGUAGES	Proficient C++, C, Python Familiar Java, MATLAB, Mathematica	
DEVELOPMENT TOOLS & FRAMEWORKS	Proficient PyTorch, Keras, CMake, OpenGL Familiar CUDA, TensorFlow, ROS, TensorRT, OpenCV, Vulkan	
LANGUAGES	Finnish Native language English Fluent (speaking, reading, writing)	
MILITARY SERVICE	Kainuun Prikaati, Kajaani Rank: Private	07/2012 - 01/2013