

## Contact

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www.linkedin.com/in/tarvometspalu  
(LinkedIn)  
cogbug.eu/ (Company)  
woird.webflow.io/ (Portfolio)

## Top Skills

Photography  
Photoshop  
Illustrator

## Languages

English (Native or Bilingual)  
Estonian (Native or Bilingual)  
Spanish (Limited Working)  
Russian (Limited Working)

## Certifications

Possibilities of data science in a  
business enterprise  
AI for everyone  
Certified SolidWorks Associate

## Publications

Cu self-sputtering MD simulations  
for 0.1-5 keV ions at elevated  
temperatures

# Tarvo Metspalu

Changing the way a robot looks at You! - We're hiring!

Tartu

## Summary

I have over 5 years of experience working with technical product development & leading international teams. 10+ years experience in science & engineering education and consultations, including organizing hackathons. I tend to deal with unexpected situations fast and remain calm. Very detail-oriented.

Before starting my work at LightCode Photonics, I worked at Bercman Technologies, improving smart city infrastructure products and services for our customers by using the latest advancements computer vision, AI, sensor fusion, analytics and vehicle-to-everything (V2X) communication.

Before this I was the Co-founder & board member at SPARK Makerlab (now Medoonity), where I established the most active makerspace in Estonia, which educated young people on engineering and helped new hardware-based companies to get started with their journey.

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## Experience

LightCode Photonics  
Product Development Engineer  
August 2021 - Present (6 months)  
Tartu, Tartumaa, Estonia

LightCode Photonics is a science-intensive deep tech company developing breakthrough technology for mobility.

We imagine a world, where routine work is automated and robots are handling tasks from city maintenance to parcel delivery, dangerous rescue missions and docking in space.

Thus we are rethinking image acquisition and solving 3D imaging in a completely new way - via intelligent perception. LightCode Photonics is

transforming 3D imaging from human-like perception to robotic vision - we are building the world's first Software-Defined 3D Camera (SD3D Camera).

Our innovative approach enables us to empower the existing sensors with software-defined capability and provide Lidar performance using accessible COTS components at an affordable cost.

The impact of 3D imaging is like the global transformation of the economy from paper-based to digital.

Wo Ird

Head Of Innovation

August 2010 - Present (11 years 6 months)

Anywhere

Startup consultation, science education shows, workshops & products, photography, video production, event hosting, web development, design etc.

Bercman Technologies

2 years 9 months

Product Manager

August 2020 - March 2021 (8 months)

Tartu, Tartumaa, Estonia

Focused on leading the 3rd generation Smart Pedestrian Crosswalk (SPC) international R&D team.

Reached up to 10-time reduction in the price while keeping most of the functionality in a more compact form. Also decreased the development and production times drastically.

Chief Technology Officer

July 2018 - August 2020 (2 years 2 months)

Estonia

Lead the development of the Smart Pedestrian Crosswalk 2nd generation with an international team and the first two generations of the Smart Mobility Hub (SMH). Built up systems and spaces for prototyping, project management and primary production.

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Bercman Technologies is a company designing, developing and manufacturing innovative products to make traffic safer and accelerate the progress towards self-driving vehicles. The company's vision is to become a leading partner for clients in Cooperative Intelligent Transportation Systems (C-ITS)

market. C-ITS solutions enable increased traffic safety through automated communication between infrastructure and connected vehicles.

### SPARK Makerlab (now Medoonity)

3 years 3 months

#### Member of Council

January 2019 - September 2019 (9 months)

Tartu, Estonia

Focused on the development of Inventors' Kit for youngsters which included everything necessary for engineering & electronics education in remote placed void of tools, materials or teachers with specialized education. Took part of Ajujaht 2018 (TOP 30) & also won 25 000 EUR support from NULA 2019 program. Reached around 20+ schools and hundreds of students. Also supported HK Unicorn Squad & KVARK Teadusteater with content.

#### Co-Founder & Board member

July 2016 - January 2019 (2 years 7 months)

Tartu, Estonia

My tasks included building & leading a team, setting up the workshop and an engineering school from scratch, public speaking, R&D in vast area of topics, strategic planning, sponsorships, writing projects & procurements, web development, marketing, design and sales, financial planning & accounting etc. The best experience so far!

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SPARK Makerlab (now Medoonity) was an open workspace in Tartu town center. We offered the tools, floorspace, cool people, tricks and tips to make the DIY dreams come true.

### KVARK

#### Performer & Creative Specialist

June 2016 - August 2018 (2 years 3 months)

Estonia

\* Came up with the brand name.

\* Created and performed many original stand-up science shows for corporate and educational organizations.

\* Helped to build the first version of a modern webpage + produce media content.

\* Wrote safety video scripts for the Estonian Road Administration where I also performed (these are still shown in the Estonian Road Museum and driving schools across the country).

\* Introduced the idea of producing science kits now available to order at KVARK's homepage.

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## Education

University of Tartu

Master's Degree, Physics · (2014 - 2015)

Tallinna Tehnikaülikool

Master of Science (MS), Industrial and Product Design · (2013 - 2014)

Tartu Ülikool

Bachelor of Science (BS), Physics · (2009 - 2013)

Hugo Treffner Gymnasium

High School Diploma, Computational and Applied Mathematics · (2006 - 2009)