

Company Profile

## About Us

#### R&D Projects

KOSGEB R&D Project - Offline Programming of Industrial Robots Completed - 2018

TUBITAK funded projects

- -Vision Based Localization System- Completed 2020
- Visual Inertial Navigation System Completed 2023

TUBITAK International R&D Project - Development of Autonomous Warehouse Multi-Robotic System (Completed – with Academic and Industrial Partners)

KOSGEB Product Development Support - Vision Based Localization System (Completed)

Digital twins' generation methodology for road safety based on real time vehicle information (EU Cascade Fund Target-X – Started in 2024 October)

- Ongoing R&D Projects - Engineering Support for Various Clients









Vins RTK – Visual Inertial Navigation System



V-Loc – Vision Based Localization System

















#### ABOUT US



# Background Team of 4 Engineers



#### Global

Local and Global Customers
- UK & Germany
Partnerships in Turkey & Abroad
for fields of activity



#### Excellence

Customer feedback on Engineering - R&D activities

#### Co-Founders



Berk TURANLI

ITU Mechanical Engineering B.Sc

Politecnico di Milano Energy Engineering M.Sc.

- Thesis on Energy Storage Applications
- Project Management for R&D and Industrial Projects
- Design & Manufacturing
- Business Development



Mert TURANLI, PhD
ITU Control Engineering B.Sc
ITU Control & Automation Eng. M.Sc.
Thesis on Multi Robot Coverage Control
PhD. on Multi Agent Collaboration Algorithms
Various National & international publications
Advanced in ROS development in C++

## Link Robotics - Organization Chart

Management

#### R&D

Algorithm Design andDevelopmentSimulation andApplication Works in

ROS, Unity, Simulink 3D

- Computer Vision Solutions

#### Design

-Mechanical & Electronic

Design for Prototyping and

Product Development

#### Testing

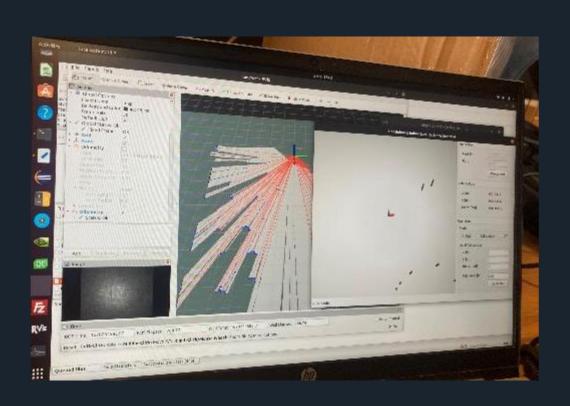
Testing of Developed
Projects Including ROS and
Simulink

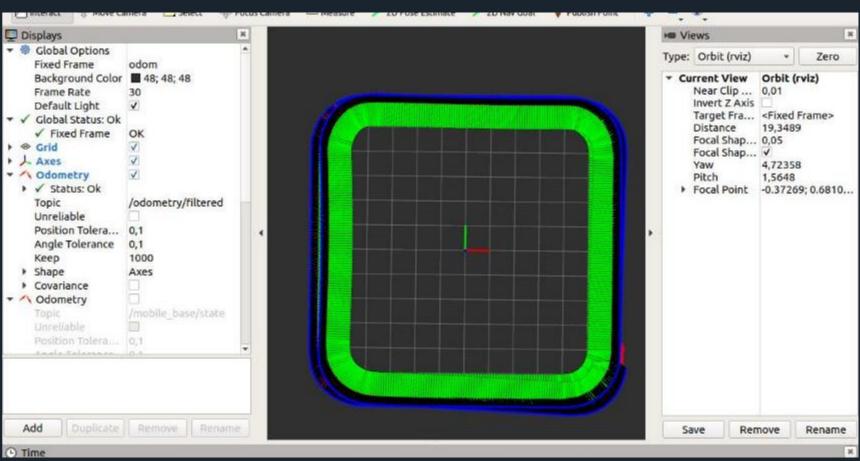
### Project Management

Project Management
Expertise in R&D and
Industrial Projects

## Vision Based Localization System – V-Loc

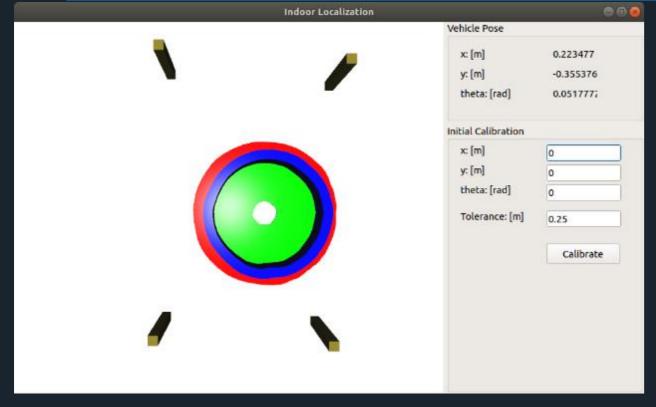


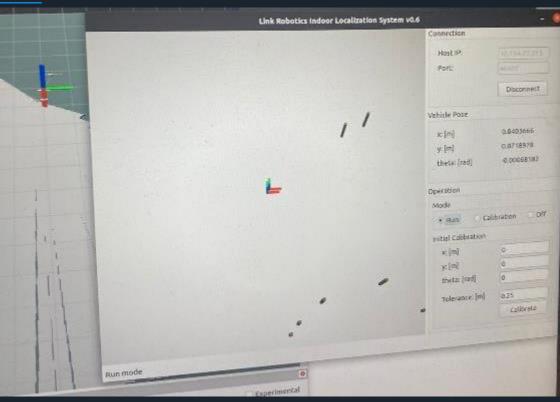




Integration and Proof of Concept for Arcelik AGVs within a private 5G Network

- https://youtu.be/QVJTt39qfFw





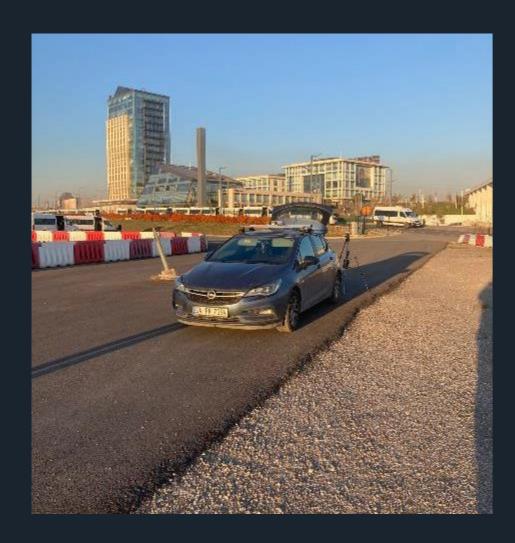


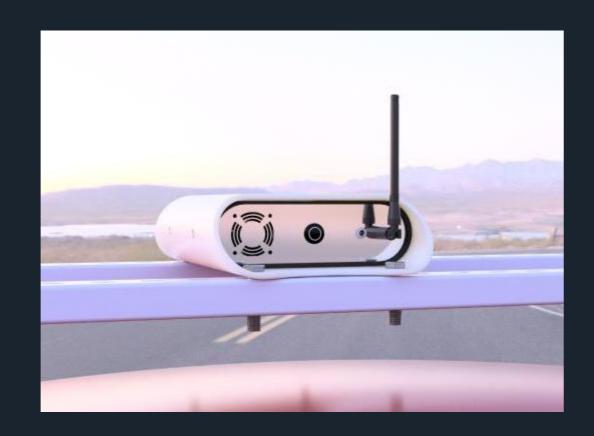
Graphical User Interface

V-Loc Enclosure and Prototype

Deployment Video <a href="https://youtu.be/tmGzk-GRbgU">https://youtu.be/tmGzk-GRbgU</a>

## Visual Inertial Navigation System - Vins RTK











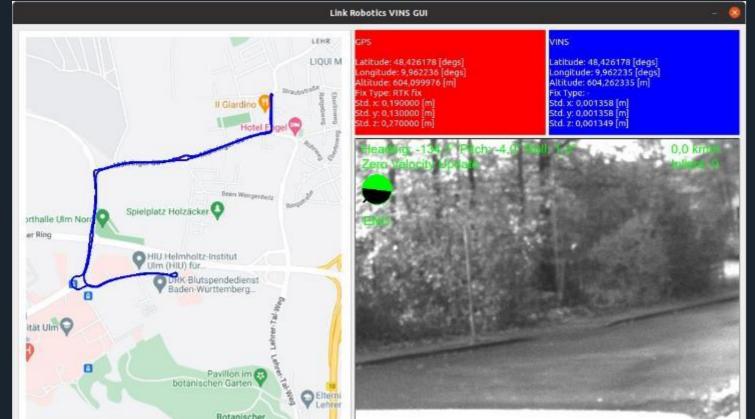
Proof of Concept for Version 2.0 is maintained in Ulm/Germany in Nokia R&D Center in Nov 2023 and rewarded by 5G-IANA consortium Video:

https://www.youtube.com/watch?v =AqS\_UAbFk3w

Validated in Real Environment – Urban Traffic and Indoor Parking Lot in Relative Mode

Proof of Concept completed in Riga/Latvia in May 2023 on an Autonomous Vehicle Platform





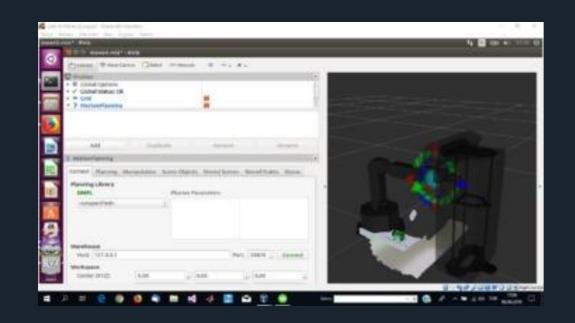
Graphical User Interface

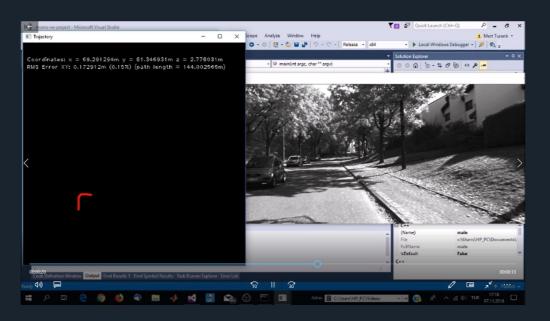
Demo Link https://www.youtube.com/watch?v=06j05mVAaUM

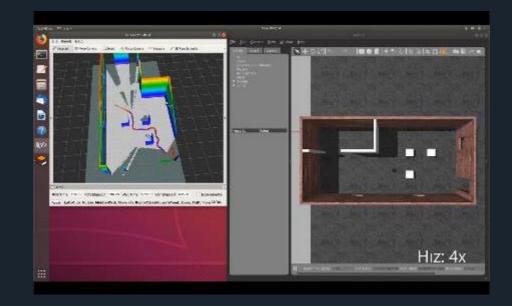


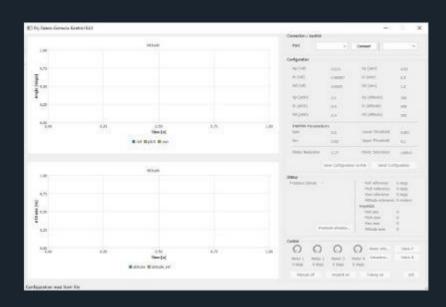


## Capabilities









#### Competence in ROS

ROS, ROS#, Gazebo, Movelt Simulation and Real Time Experiments

#### Computer Vision

- Visual Odometry & Visual Inertial Odometry
- Stereo Vision Pose Estimation
- -Object Recognition GPU Accelerated Systems

#### Mobile Robots

- Autonomous Navigation Landmark
   Localization, Trajectory Planning
- Sensor Fusion

#### Unmanned Vehicles

- Low Level Control Software
- Visualization and Graphical Interface
- Electronics / Avionics



#### Link Robotic Technologies

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