









MG-3-2-2018 The Autonomous Ship MG-BG-01-2018 Unmanned/Autonomous survey activities at sea MG-2-2-2018: Marine Accident Response

Organization: Puzzle Projects <u>www.puzzlepro.co.il</u> (SME)

Contact Person: Mr. Jonathan Ericson Jonathan@puzzlepro.co.il

- Provides project life cycle services for Maritime (design, testing, Integration, operation, training, and implementation)
- Team with operational expertise in the maritime domain
- Expertise in Unmanned/Autonomous Surface/Underwater Vehicles
- Project service manager for the first fully operational autonomous vessel in use today – PROTECTOR USV (Raphael Ltd.)

Looking to join and provide their expertise to projects in the Maritime domain







MG-3-2-2018 The Autonomous Ship

-Organization: GPSDome www.gpsdome.com (SME)

-Contact Person: Mr. Nir Gartzman

nir@thedockinnovation.com

GPSdome develops and manufactures a **Cyber devices against GPS blocking and jamming** designed to protect GPS-based systems for location and time synchronization from short-range disruptors.

Interested to join existing consortium





MG-BG-01-2018 Unmanned and autonomous survey activities at sea

MG-2-6-2019: Moving freight by Water

—Organization: DockTech https://www.docktech.net/ (SME)

-Contact Person: Mr. Nir Gartzman nir@thedockinnovation.com

DockTech is a water depth analysis platform for ports and waterways, offering real-rime view of water channels as well as a pattern recognition based prediction

Proposed Project Description: Develop algorithms that use 'crowdsourcing' depth measurement data and AI analysis to **predict the sea bed depth areas** addressing the challenge to "Minimizing deep sea deployment and recovery costs".

Interested to join existing consortium

(partners sought: ports, dragging companies, shipyards)





MG-2-1-2018: Human Factors in Transport Safety

Organization: Faculty of Aerospace Engineering, Technion (RES)

Contact person: Prof. Arthur J. Grunwald attiegr@gmail.com

Lab specializing in cockpit systems and human factors in flight and rail control systems

Proposed Project Description:

- Enhancement of safety of standing passengers (elderly) by increasing their awareness and anticipation of changes in velocity
- Increase drivers performance and awareness of their passengers

Consortium partners: University of Montpellier (FR)

Partners sought: Metropolitan transport operators; Researchers on human factors related to posture, standing, audio-visual alerts





MG-2-1-2018 Human factors in transport safety
MG-3-3-2018: "Driver" behavior and acceptance of automated transport
DT-ART-03-2019 Human centered design for the new driver role

Organization: Studio ED&U (SME)

Contact person: Mr. Yakir Yaniv Yakir@edu-studio.net

Experts in human factors engineering and user experience of products, industrial machinery, and working environments.

Looking to join and contribute to projects in the following aspects:

User centered design, HMI, ergonomics and user research activities



MG-2-1-2018: Human Factors in Transport Safety

LC-MG-1-1-2018: Reduction of transport impact on air quality

MG-2-9-2019: Low-emission freight transport

MG-2-4-2018: Coordinating national efforts in modernizing infrastructure

MG-4-2-2018: Building Open Science platforms in transport research

MG-2-7-2019: Safety in an evolving road mobility environment

Organization: Israel Traffic Police (END USER)

Contact person: Mrs. Mali Sher msher@police.gov.il

Looking to join and contribute to projects that in the following areas:

- Contribute real data on road accidents (MG 2-1)
- Traffic enforcement elements (e.g. devices for monitoring noise and emissions) – data collection, identification of infringing vehicles (MG 1-1. 2-4, 2-9)
- Big data analytics and visualization methods (MG 4-2)
- The traffic police officer duty in the future (MG 2-7)





MG-2-1-2018 Human Factors in Transport Safety DT-ART-02-2018 Impact assessment for road automation MG-3-3-2018 Driver behavior and acceptance of automated transport

Organization: SafeMode <u>www.safemode.co</u> (<u>SME</u>)

Contact Person: Mr. Ido levy, ldo@smode.co

Focusing on <u>prevention of human based accidents</u> (based on monitoring and incentivize drivers` behavior)

Proposed Project Description:

- Develop a system that monitors and affects drivers` behavior based on Al algorithms and behavioral economics
- Integrate the model into autonomous vehicles decision making systems
- V2V connectivity for real time risk management

Partners sought:

- Drivers monitoring solution: car sharing platforms, insurance companies
- Autonomous cars layer: car manufactures, V2V connectivity solutions





MG-4-1-2018 New regulatory frameworks
LC-MG-1-4-2018 Hardening vehicle environmental protection
DT-ART-01-2018: Testing and certification for highly automated driving
MG-4-5-2019 An interconnected transport system meeting citizens' needs
DT-ART-04-2019 Developing and testing shared, connected and cooperative automated vehicle fleets

Organization: GuardKnox Cyber Technologies (<u>SME</u>)
Contact person: Mr. Dionis Teshler, <u>dionis@guardknox.com</u>

Provides Cyber Security hardware solutions for car manufacturers

Looking to join and contribute to projects in the following areas:

- Development of cyber-security vulnerability assessments
- Regulatory requirements (including data protection and privacy)





DT-ART-01-2018 Testing, validation and certification procedures for highly automated driving functions MG-2-7-2019 Safety in an evolving road mobility environment

Organization: VAYAVISION <u>vayavision.com</u> (SME)

Contact Person: Mr. Moshe Langer Moshe.Langer@vayavision.com

Sensing and cognition systems for autonomous driving (based on Al sensor fusion platform and "Point and Shoot" LiDAR)

Proposed Project activities:

ART-01: Develop automated **testing procedures** for automotive driving (eg identification of objects on the road - bicycles ,pedestrian walking between cars...) **MG-2-7:** Develop automated **safety procedure** (such as: behavior prediction based on threat classification. and define driving route)

Partners sought: Automotive Industry (OEM, Tier 1 suppliers, vendors of driving decision and control modules); Academia: autonomous driving, algorithms,, Machine vision, LIDAR, RADAR,





LC-MG-1-1-2018 Reduction of transport impact on air quality
LC-MG-1-2-2018 Sustainable multi-modal inter-urban transport
LC-MG-1-3-2018 Harnessing and understanding the impacts of changes in urban mobility on policy making

Organization: PGL Transportation Engineering and Planning www.pgl.co.il (SME)

Contact Person: Dr. Eyal Ashbel, eyal.Ashbel@pgl.co.il,

Transportation planning firm, with a wide variety of field-experts, operating in the domains of:

- smart mobility
- Infrastructures
- urban transportation models and simulations
- GIS applications development
- Emission reduction

Looking to join relevant projects, providing proven field experience, engineering expertise, software development, and project management capabilities.





MG-2-8-2019 Applications of drones for ensuring safety in transport MG-2-7-2019 Safety in an evolving road mobility environment

Organization: Magna BSP <u>www.magnabsp.com/Industry</u> (SME)

Contact Person: Mr. Gideon Rosen gideon@magnabsp.com

3D video surveillance solutions

- Video analytics, incorporating sound, 3D images, HD video, thermal signature
- Based on deep learning algorithms
- Video analytics from drones cameras in real time

Project description:

- Video analytics in real time for all weather conditions
- Camera On chip solutions
- Urban traffic monitoring and control

<u>Partners sought:</u> Camera manufacturer, drone manufacturer, drone service, provider, municipality (end user)

Existing partner: Imesapi Ltd. (Spain)





MG-4-5-2019 An inclusive digitally interconnected transport system meeting citizens' needs and possibly

Organization: Save A Train www.saveatrain.com (SME)
Contact Person: Mr. Ishay Erel ishay@3d-innotech.com

Proposed Project Description:

- Applying Dynamic Pricing concept/s and business model/s
- Identifying innovative digitally based mobility solutions and passengers transport services
- Leveraging social media networks, needed in order to fully benefit from digitalization in transport, particularly in the Rail Industry.
- Trace the key obstacles to the adoption of such new digital mobility solutions

Partners sought: IT /Travel Technology group (Transport Consulting, Software solutions Groups) or a Revenue Management /Data Analytics consulting group possessing a scientific approach which is already active /offering YMS /RMS either in the Transport/Hospitality industries [Preferably working with Industry].





MG-4-5-2019 An inclusive digitally interconnected transport system meeting citizens' needs MG-4-2-2018 Building Open Science platforms in transport research

Organization: Initech software solutions (SME)

https://www.initech.co.il/en/connected-cars-mobility/

Contact Person: Mr. Ishay Tentser ishay@initech.co.il

Provides **software services to the automotive sector** (specializing in IoT, Big Data, AI technologies), providing:

- Data collection and storage on cloud platform collect telmetry data
- Automated processing and analysis using machine learning algorithms.
- Data Analytics and Dashboard for cars, Voice and touch interfaces
- Web, mobile, and wearable applications (that can talk to the car)
- Data security & privacy data anonymization for commercial usage.

Looking to join relevant projects, providing software and POC services



DT-ART-04-2019: Developing and testing shared, connected and cooperative automated vehicle fleets

Organizations:

- NTB Management Planning & Control Ltd. <u>SME</u>
- BASHAN Command & Control Management Ltd. <u>SME</u>

Contact Person: Mr. Joseph Lieberman ntbisrael@gmail.com

Activities:

- Traffic control and management models
- Software systems development for traffic management

Looking to join relevant projects, providing ICT system engineering and software development





LC-GV-03-2019 User centric charging infrastructure

Organization: Bar-Ilan University (BIU), Department of Physics - laboratory for superconductivity & magnetism (RES)

http://superconductivity.biu.ac.il/

Contact Persons: Prof. Yosi Yeshurun <u>yeshurun@mail.biu.ac.il</u>,

Dr. Shuki Wolfus shuki Wolfus@gmail.com

Proposed Project Description: Improving energy transfer efficiency in wireless charging of electric vehicles (using advanced design methods from the lab expertise).

Partners sought:

- Infrastructure companies and academic investigators
- Electric motor manufacturers
- Wireless charge companies and researchers





LC-GV-03-2019 User centric charging infrastructure LC-GV-01-2018: Components and systems for next-gen electrified vehicles

Contact Person: Mr. Peter Graner peterfixgreener@gmail.com

Proposed Project Description:

Development of an **Urban Autonomous Robotic Parking Facility** for Multiple-EV(18) **with ultra fast Charging** infrastructure and interconnected payment systems . Scalable infrastructure for ramp-up of expected electric mobility needs

Partners sought: Research institutes (eg Fraunhofer, Bremen), Industry (Robotics, Parking Infrastructure)



Thank you for your attention

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