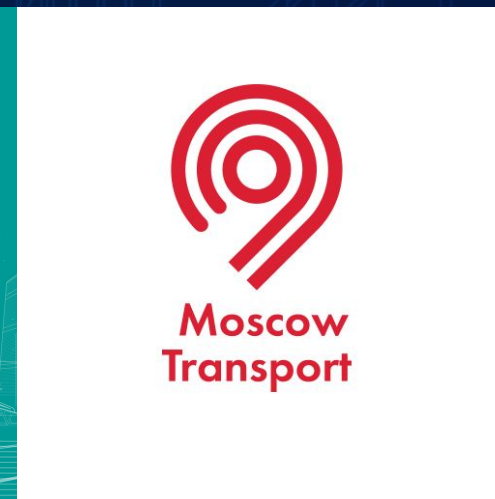


**luno**



**COMPUTER VISION FOR MOSCOW SCOOTERS**

# Shared scooter **usage growing rapidly**, but rider & pedestrian experience **requires new safety technology**

- Moscow – 20,000 scooter fleet in 2021 (expected future cap of 40,000)
- \*April to August 2021 – 55 accidents leading to hospitalisations and 2 associated deaths in Moscow
- \*80% of accidents occurred in pedestrianised locations (sidewalks, crossings, building entrances etc)
- **GPS tech cannot fix these problems**

\*[Irina Volk](#) – Russian Ministry of Internal Affairs, 24th August 2021



**Russia**

● This article is more than **6 months old**

**Moscow imposes 9mph limit on e-scooters after string of accidents**

*Reuters in Moscow*

Tue 8 Jun 2021 13:22 BST

Moscow is to impose speed limits on electric scooters in its city centre as calls for action grow following a string of accidents.

Moscovites have hired the scooters more than 1.2m times since early April and are expected to continue flocking to rental services until the autumn.

But this has worried city authorities as scooter accidents increase, including one in St Petersburg that left David Zaleyev, a dancer from the Mariinsky Ballet, temporarily in a coma.

The logo for Luna Urban Mobility Platform, featuring the word "luna" in a bold, lowercase, sans-serif font. The letters are white with a blue shadow effect, set against a dark blue background.

Urban Mobility  
Platform

A black and white halftone sign with a white border. The text "NO SCOOTER RIDING" is written in large, bold, white, sans-serif capital letters on a black background. Below this, on a white background, the text "ON SIDEWALK" is written in smaller, bold, black, sans-serif capital letters.

ON  
SIDEWALK

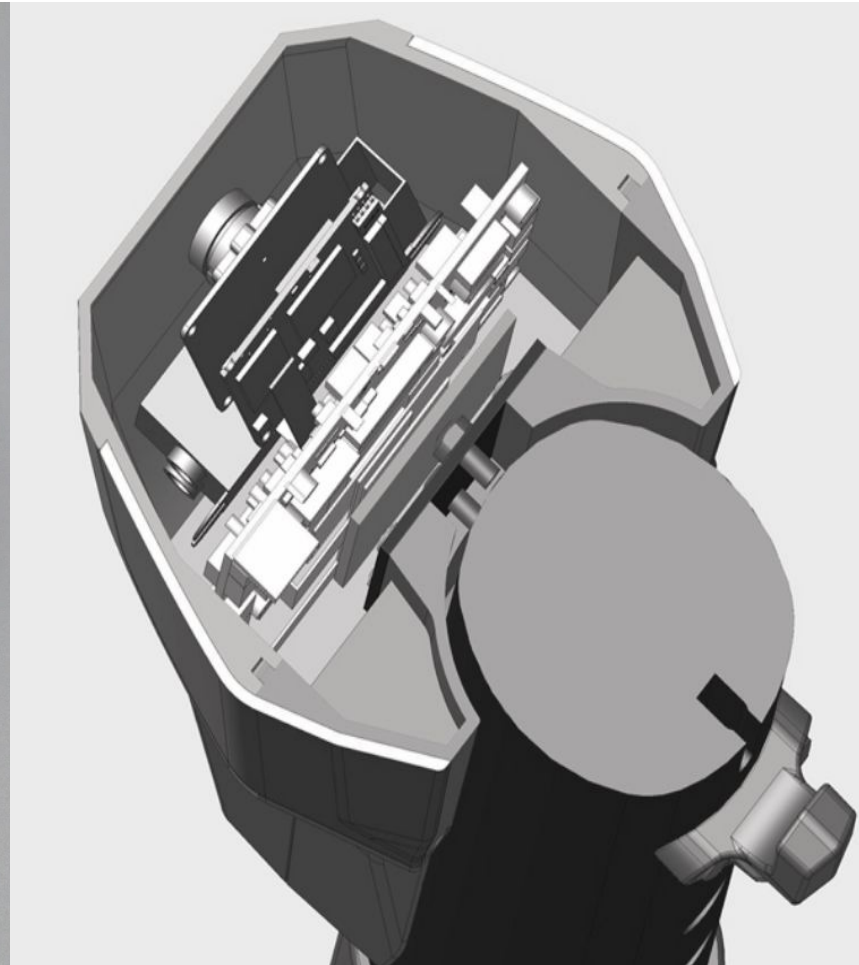
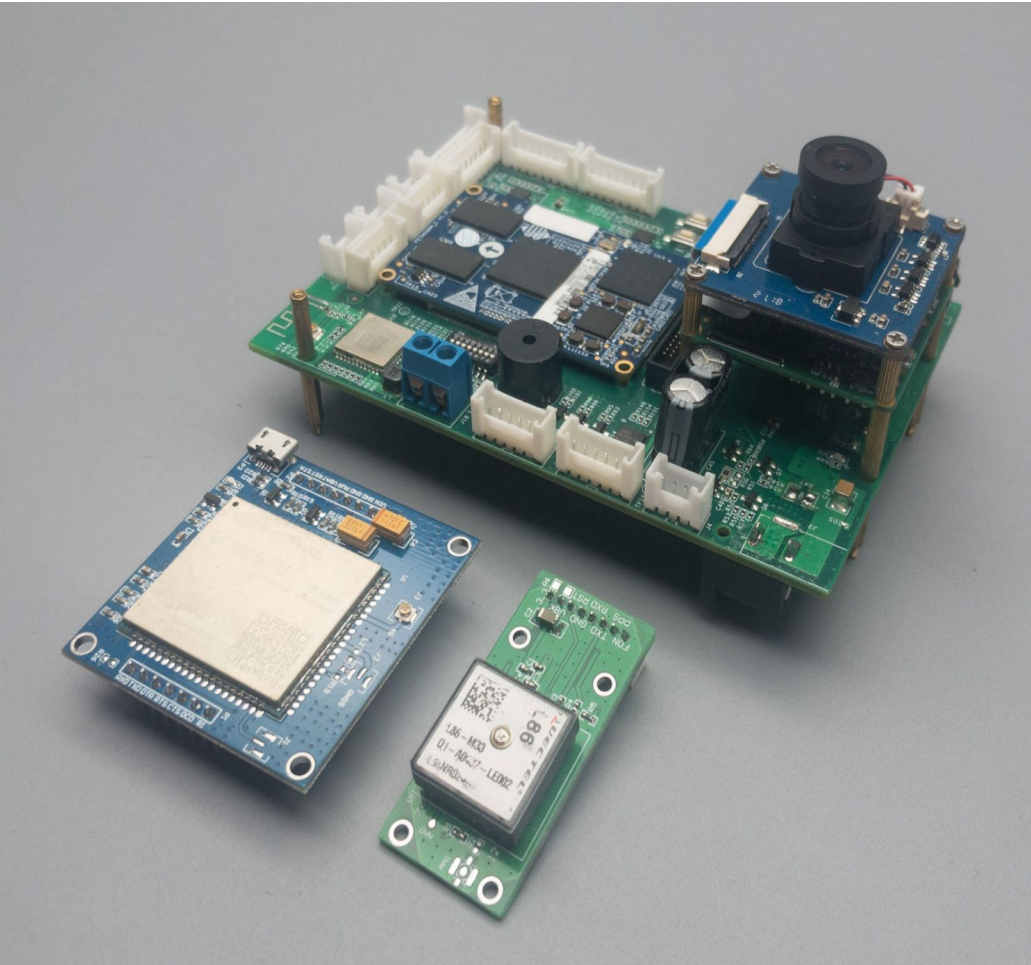
Luna Computer Vision/AI technology keeps scooters:

- 1. In the right lane**
- 2. Away from pedestrians**
- 3. Parked correctly**

A white sign with a black border. The text "Walk Zone" is written in a large, bold, black, sans-serif font. Below the text, there is a small, stylized graphic of a person walking.

**Luna Hardware:**  
**Luna Software:**

**Vision module ('smart camera')**  
**Artificial intelligence + Cloud backend**



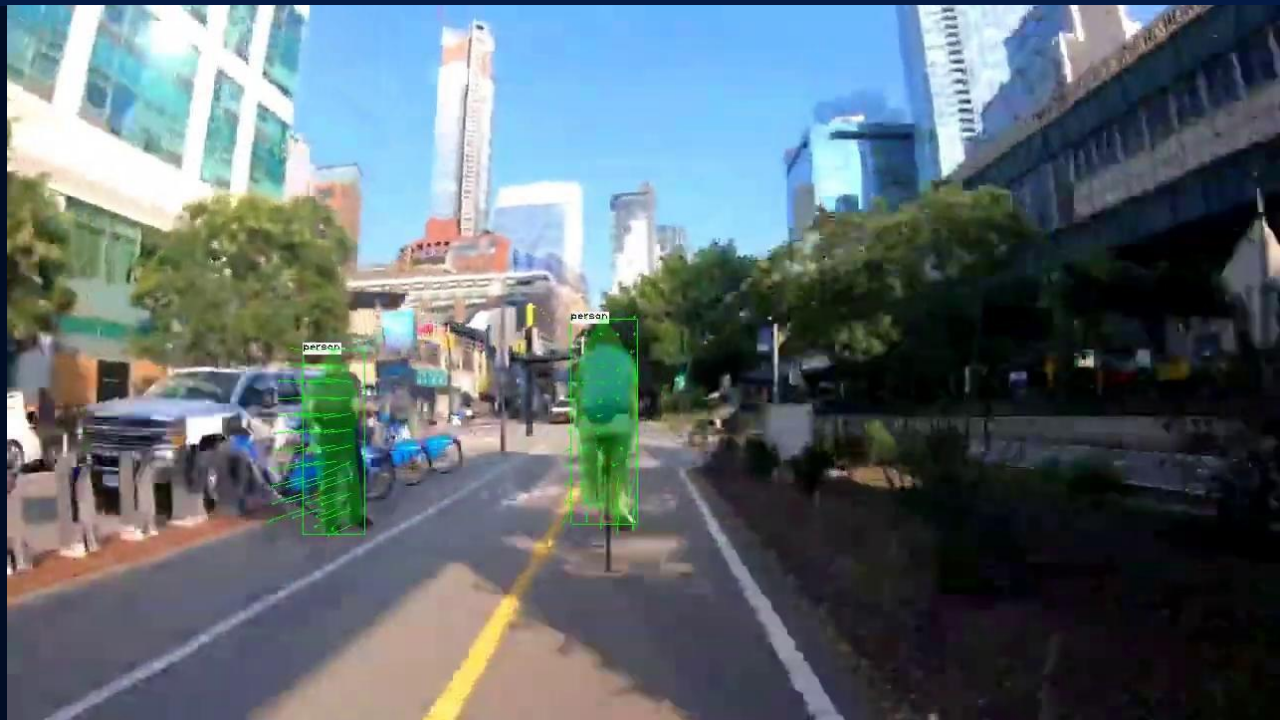
GPS is inherently inaccurate (typically 5m-15m accuracy) and cannot keep scooters in the appropriate lane or parking bay. Computer vision solves this problem

# Luna AI gives operators and cities **real time & precise visual confirmation** of where/how scooters are being ridden



## **Lane detection for scooters**

Is the scooter being ridden on a road, or on a footpath/sidewalk?  
Should the rider be warned?



## **Pedestrian detection for scooters**

How many pedestrians are in the scooters path?  
Should the rider and/or pedestrians be alerted?

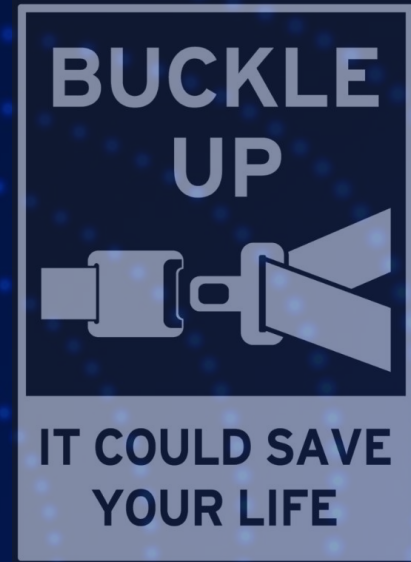
# The Luna app/phone based '**AI parking selfie**' enables the creation of '**virtual docks**' to ensure **proper parking**



- *\*After studying international experience & assessing the risks, we chose a hybrid model - attaching scooters to city bike parking lots. Free placement is too risky*
- Luna allows the city to create new flexible, 'free placement' scooter stations/parking lots ANYWHERE, with ZERO infrastructure costs
- All that's required now to create a scooter station, is a can of paint
- Riders will continue to be charged until they correctly place the scooter in the bay = no more trip hazards or vandalism

\*Head of the sharing projects of the Department of Transport, [Magomed Kolgaev](#)

Luna vision technology is a 'seat belt moment' for the shared scooter industry





**luno**

**Urban Mobility  
Platform**

**APPENDIX**



# Luna/MTI – Pilot project proposal for Moscow Transport

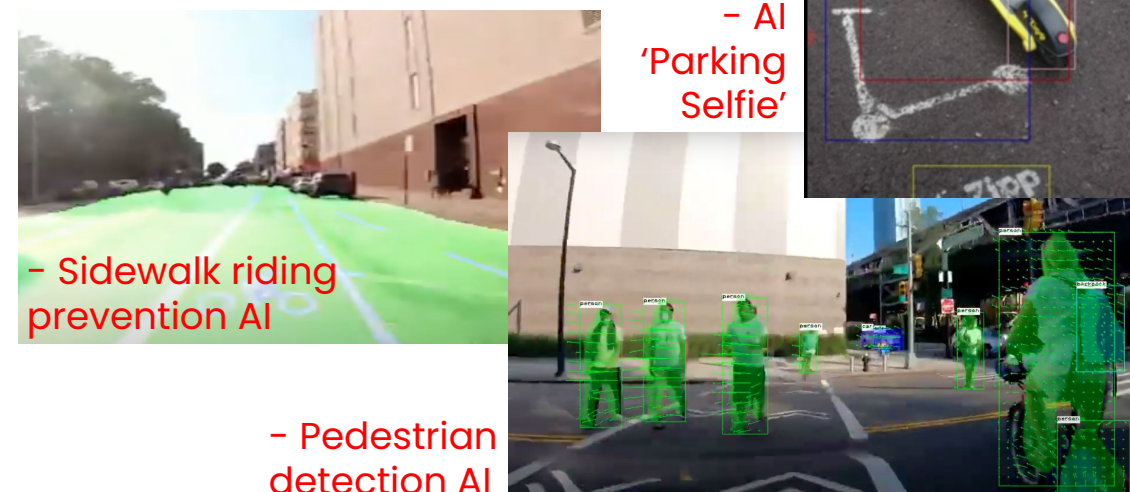
- **100 shared scooters** in Moscow, equipped with Luna lane detection & pedestrian detection computer vision hardware and software
- **3 month pilot** commencing **April 2022**
- 1 or more **local partner operators** to participate in the pilot, chosen from **Yandex, Whoosh, Urent** etc
- Operators/Moscow pays for **Luna hardware** (€200/unit) + pilot project management fee of €10k (**€30k total cost**)
- Fee covers travel, **tech integration**, PR, data costs etc
- Luna provides **all software/AI algorithms**, backend platform, dashboards etc, **free of charge**
- Luna works with operators, MTI and Moscow Dept. Transport Officials to scope out the pilot in advance (**agreed KPI's**), and to generate a **final report** post-pilot
- Luna provides Moscow with a **dashboard/heatmap of sidewalk riding/pedestrian near miss incidents**
- Luna also provides the prototype '**AI parking selfie**' technology **free of charge to operators** during pilot – this can be deployed across entire Moscow scooter fleets (not limited to 100 scooters like the hardware)
- MTI to connect Luna to selected operators/Moscow officials and help **structure/administer** pilot programme
- Luna, MTI and Moscow Transport to **publicise the pilot** and explore **additional smart city applications** for the tech



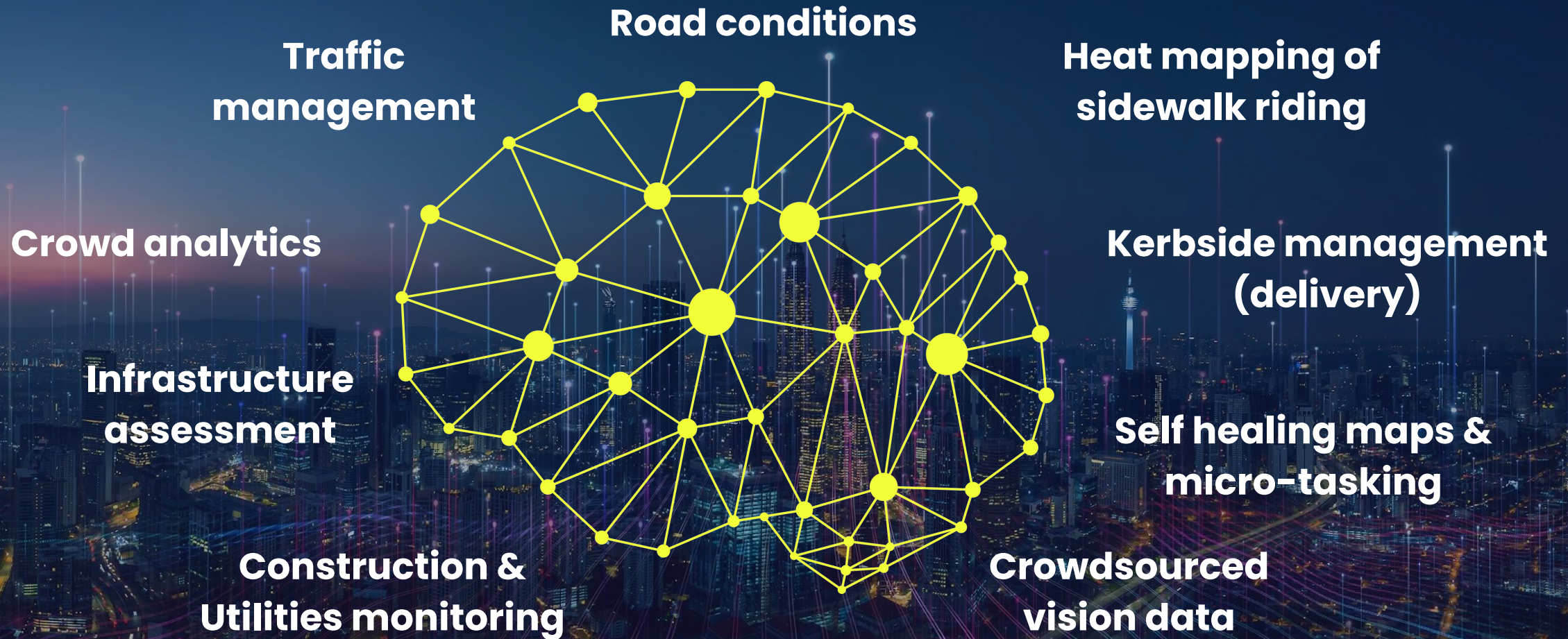
Moscow scooter operators to participate in the pilot



100 scooters equipped with Luna AI tech:



# Opportunity to turn scooter fleets into 'Mobile Sensor Networks' for Smart Cities



# Founding team – Luna is a unique mix of telematics, cloud, AI/computer vision software, hardware, electronics & smart city skills

## Andrew Fleury – CEO

Andrew has spent his career to date in the field of telematics, fleet management and intelligent vehicles. Andrew has spent 15 years as the CEO of Transpoco, the leading telematics provider in the Irish market, with customers in more than 60 countries.

Andrew has a keen interest in the future of transport, mobility and unmanned autonomy.

He is currently the president of the 1-Telematics Alliance, a European thought leadership group. He is also on the steering committee of both the “Vehicle Of The Future” (VOTF), and the “Connected and Autonomous Vehicles” (CAV) industry groups in Ireland.

Andrew serves as the Luna CEO

## Ronan Furlong – CBO

Ronan is the Executive Director of Dublin City University’s Innovation Campus, which is Ireland’s leading cluster of IoT, M2M, Data Analytics and e-mobility companies.

Ronan is a qualified Architect and Smart Cities/Sustainability expert and sits on the advisory committee of Smart Dublin. He also advises governments, municipalities and real estate developers on innovation district/cluster and e-mobility policy development.

Ronan has a B.Arch from UCD, a MBA from Trinity College Dublin and a Dip. Sustainable Development from DCU.

Ronan’s role is as Chief Business Officer for Luna.