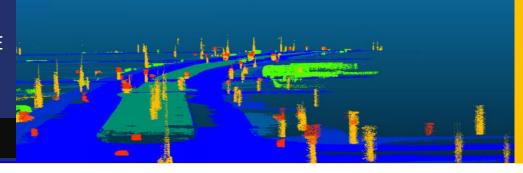
DIGITAL ROADS OF THE FUTURE

2023 June | Issue 2

NEWSLETTER



ANNOUNCEMENTS

New starters

Senior Research Associate in Automation and Robotics-

Digital Roads Prosperity Partnership welcomes our new Senior Research Associate in Automation & Robotics, <u>Dr Jei Xu</u>. Dr Xu will be starting with us on 24 July 2023.

Marie Sklodowska-Curie Future Roads Fellows Cohort 2

We are thrilled to announce the arrival of MSCA Future Roads Cohort 2, the newest members of our prestigious research group. On June 15th, we extended a warm welcome to 11 exceptionally talented individuals who are poised to revolutionize the digital transformation of the road industry. To read more about what they will be working on please click here.



Alumni network

Dr. Vahid Afroughsabet continued his career in a new capacity with National Highways. You can find more information about his work as an MSCA Future Roads Cohort 1 Fellow here: https://drf.eng.cam.ac.uk/staff/dr-vahid-afroughsabet.

NEWS

In the news



UKRI published a corporate report on EPSRC Prosperity Partnerships supporting the collaboration of business and researchers. The report highlights how Digital Roads of Prosperity Partnership is working towards making roads safer and greener. Specific research-led projects, which are also backed by expertise from industry could form the basis for consultations to policymakers.

To read the report: https://www.discover.ukri.org/bringing-together-business-and-academia/index.html

Engagements

Prof Brilakis presented his view on what is the value of information management, what we mean by digital twins and where we are now in the transformation of the industry at the Construction Digital Twin Summit (21-24 March). Click here to listen to the talk.

Dr. Nevena Vajdic presented the DRF Research Initiative to a wider professional audience at the International Road Federation (IRF Global) event, 'Vision Zero for the Balkans,' in Belgrade on 16 May. This presentation was part of the 7th UN Global Road

Safety Week. She also presented the initiative at the regional meeting of the Trans-European North-South Motorway (TEM) organized by UNECE on 12 June.

Publications

- 1. PhD student, Diane Davletshina's paper titled "A survey on constructing and maintaining geometric digital twins of existing highways" has been accepted for Proc. of the 2023 European Conf. on Computing in Construction (EC3) and the 40th CIB W78 International Conf. (ec-3.org).
- 2. PhD student, Fergus Mok's paper titled "Enriching and Maintaining Road Digital Twins with Condition Information" has been accepted for Proc. of the International Conference on Intelligent Computing in Engineering (EG-ICE).
- 3. Senior Research Associate, Dr Georgios Hadjidemetriou's paper titled "On the performance of pothole detection algorithms enhanced via data augmentation" has been accepted for the European Working Group in Transportation (EWGT 2023) Conference.
- 4. Industrial Research Fellow, Dr Nzebo Richard Anvo's paper titled "<u>Autonomous Detection and Sorting of Litter using Deep Learning and Soft Robotic Grippers</u>", has been accepted for publication on Frontier Media 2022 journal.
- 5. Phd student, Percy Lam's paper titled "Analysing the Conditions of Road Assets with a Network Thinking" has been accepted for Proc. of the 2023 European Conf. on Computing in Construction (EC3).
- PhD student, Diane Davletshina's paper titled "<u>Using road design priors to improve large-scale 3D road scene</u>
 <u>segmentation</u>" has been accepted for Proc of the ASCE International Conference on Computing in Civil Engineering, June 2023.

UPCOMING TALKS, LECTURES AND EVENTS

Talk at CivEng Building – 26th July

MSCA Future Roads Fellow Jinying Xu will deliver a speech on Carbon management in the highway sector: Toward data trustworthiness. If you would like to attend via zoom, please email csic-admin@eng.cam.ac.uk for the link.

FutureRoads Fellowships Updates – 7th September

Future Roads Programme will be holding the update sessions where FutureRoads Fellows will be presenting the progress of their research projects together with Industry partners involved in the supervision. The agenda will be shared in the coming months.

Digital Roads of the Future Annual Event - 8th September

The Digital Roads Prosperity Partnership will be holding its annual review on the 8th of September. The first year of the project has seen us establish a road dataset to develop the backbone of our cyber-physical platform. The Digital Roads Annual Review will include a visual tour of the dataset, a review of project progress, a demonstration of the platform and our plans and proposals for the coming year. The agenda will be updated on our website in the coming months: <u>Digital Roads Annual Review</u> 2023 | <u>Digital Roads of the Future (cam.ac.uk)</u>

Cambridge Alumni Festival – 22nd September

Join Digital Roads of the Future for a panel discussion on "<u>Digitalization of the road industry - way forward</u>", featuring Prof Ioannis Brilakis – Professor of Civil & Information Engineering, University of Cambridge, Tim Embley - Group Research & Innovation Director, Costain, Phillip Proctor CEng MIET- Head of Research, National Highways and Dr Lavindra de Silva Programme Director, Digital Roads of the Future Initiative. The session will be moderated by Dr Mahendrini Ariyachandra, Programme Manager, Digital Roads of the Future.

Please send any items that you would like to be included to drf-initiative@eng.cam.ac.uk.





