Workshop-5 Program

Smart pavement – vehicle monitoring, tools and technics for functional pavement

July 11, 2021

Time: 12:30 - 15:30 GMT

Weblink:

https://www.ifrae-delft.com/workshop5

Contact Email: o.d.akinmade@tudelft.nl

c.wang-13@tudelft.nl

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

12:30 – 12:30 (GMT) **14:30 – 14:30 (CET)** **20:30 – 20:30 (CST)** **18:00 – 18:00 (IST)**	**Welcome** Dr Anupam Kumar, Delft University of Technology
12:30 – 13:00 (GMT) **14:30 – 15:00 (CET)** **20:30 – 21:00 (CST)** **18:00 – 18:30 (IST)**	**A brief introduction to Machine Learning** Sumit Sourabh, ING Bank in Amsterdam
13:00 – 13:30 (GMT) **15:00 – 15:30 (CET)** **21:00 – 21:30 (CST)** **18:30 – 19:00 (IST)**	**Intelligent Monitoring of Infrastructures - I** Alfredo Núñez Delft University of Technology
13:30 – 14:00 (GMT) **15:30 – 16:00 (CET)** **21:30 – 22:00 (CST)** **19:00 – 19:30 (IST)**	**Intelligent Monitoring of Infrastructures - II** Alfredo Núñez Delft University of Technology
14:00 – 14:30 (GMT) **16:00 – 16:30 (CET)** **22:00 – 22:30 (CST)** **19:30 – 20:00 (IST)**	**Pavement Monitoring: A General Overview and Latest Trends** Dr Yang, Chang'an University, China
14:30 – 15:00 (GMT) **16:30 – 17:00 (CET)** **22:30 – 23:00 (CST)** **20:00 – 20:30 (IST)**	**Road Condition Monitoring and valuation in Low Volume Roads** Dr. H.R.Pasindu, University of Moratuwa, Sri Lanka
15:00 – 15:05 (GMT) **17:00 – 17:05 (CET)** **23:00 – 23:05 (CST)** **20:30 – 20:35 (IST)**	**Break**
15:05 – 15:35 (GMT) **17:05 – 17:35 (CET)** **23:05 – 23:35 (CST)** **20:35 – 21:05 (IST)**	**Pavement Monitoring &Safety** Dr. Wang Rutgers, The State University of New Jersey, USA
15:35 – 15:35 (GMT) **17:35 – 17:35 (CET)** **23:35 – 23:35 (CST)** **21:05 – 21:05 (IST)**	**Closing remarks** Dr. H. Wang

Smart pavement – vehicle monitoring, tools and technic for functional pavement

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

Workshop Chairs

Dr. Kumar Anupam is an assistant professor in the Section of Pavement Engineering, Department of Civil Engineering and Geosciences, Delft University of Technology, the Netherlands. He is actively involved in teaching courses such as Micromechanical modelling of AC, Continuum Mechanics and Pavement Construction and Maintenance. His research activities are related but not limited to performance-based big-data analytics; tire-pavement interactions and micromechanical modeling of AC. He has been involved in several international projects which include FP7 EU projects and projects in the middle east. In national projects, he works in close cooperation with the Rijkswaterstraat, the Netherlands. He is a co-editor of Functional Pavement Design IV: Proceedings of the 4th Chinese - European Workshop on Functional pavement Design, CRC Press and Advances in Materials and Pavement Prediction: Papers from the International, CRC Press. He is an active member of the ISAP, TRB, APSE, iSMARTi and serves on the editorial board member of IJPE. Dr. Anupam holds a Bachelor's degree from Indian Institute of Technology-Roorkee, India and PhD degree from National University of Singapore, Singapore.

Dr. Hao Wang is currently an Associate Professor and Graduate Program Director of Department of Civil and Environmental Engineering at Rutgers, The State University of New Jersey, USA. His research areas focus on sustainable and smart infrastructure materials and pavement system. He has been PI or Co-PI of more than 40 research projects sponsored by federal government and state agencies in U.S. He has received a number of awards including AASHTO High Value Research Award, Educator of The Year Award from ASCE New Jersey Section, “Wang, Binggang” Young Scholar Award, and Emerging Outstanding Academic from Academy of Pavement Science and Engineering (APSE). He serves as the chair of Mechanics of Pavement Committee at Engineering Mechanics Institute of ASCE, Associate Editor of Journal of Transportation Engineering Part B: Pavement, and editorial board member of several journals. He has advised 10 PhD graduates as major advisor since he joined Rutgers University in 2011.

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

About the speakers

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

Topic: A brief introduction to Machine Learnin

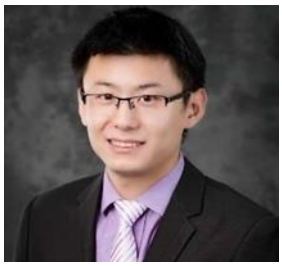
Sumit Sourabh is currently working as a senior front office trading Quant Analyst within Financial Markets at ING Bank in Amsterdam. In his role, he is responsible for the development and implementation of data-driven pricing and risk models for trading desks and risk departments. Sumit has a joint position as a Research Scientist at the Informatics Institute, University of Amsterdam. He is associated with the European Union H2020 Bigdata Finance project on machine learning for trading and risk management. Prior to his current position, Sumit did a PhD in Mathematics funded by an EU Erasmus Mundus grant at the University of Amsterdam specializing in mathematical logic and theoretical computer science.

Topic: Intelligent Monitoring of Infrastructures

Alfredo Núñez is an Assistant Professor in the field of Intelligent Railway Infrastructures at the Section of Railway Engineering, Department of Engineering Structures, the Delft University of Technology in The Netherlands. He received a Ph.D. degree in Electrical Engineering from the University of Chile, Santiago, Chile, in 2010. He was a postdoctoral researcher with the Delft Center for Systems and Control, Delft, The Netherlands, from 2010 to 2013. He is a Senior Member of IEEE since 2014 and author/co-author of over a hundred international journal and international conference papers. He belongs to the Editorial Board of the journals IEEE Transactions on Intelligent Transportation Systems - IEEE (Associate Editor) and Applied Soft Computing - Elsevier (Editorial Board Member). His research interests include railway infrastructures, total control of railway systems, intelligent conditioning monitoring and maintenance of engineering structures, computational intelligence, big data, risk analysis, and optimization.

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

Topic: Pavement Monitoring: A General Overview and Latest Trends



Dr. Yang is currently a professor at Chang'an University, China. His research interests include automated pavement distress detection and repair, advanced pavement materials and construction technologies, multi-scale modeling of road structures, etc. He has led several research projects such as National Natural Science Foundation of China (NSFC), Australia Research Council (ARC), joint research project between Australia and Germany, joint research projects between China and Australia. He is currently an academic member of the journal Advances in Civil Engineering, topic editor of the journal Materials, the Youth Academic member of Journal of Traffic and Transportation Engineering (JTTE). He is the co-chair of the committee of asphalt materials in the world transportation convention (WTC). He is also the lead guest editor of several special issues. He is a manuscript reviewer of more than 30 journals. He has published more than 70 journal papers with a Google scholar citation h-index of 24.

Topic: Road Condition Monitoring and Evaluation in Low Volume Roads

Dr. H.R.Pasindu is currently serves a Senior Lecturer at the Department of Civil Engineering, University of Moratuwa, Sri Lanka. His research interests are in the area of pavement management, road safety and airfield pavement. He obtained his Ph.D. in Civil Engineering from the National University of Singapore. He worked as an Engineer in the Road Asset Management Division of the Land Transport Authority, Singapore and also served as a consultant for ADB and World Bank for low volume road development projects and highway feasibility projects in Sri Lanka. He currently serves as a Council Member in the National Council for Road Safety, Council Member of the Chartered Institute of Logistics and Transport, Sri Lanka and Council Member of Asian Pavement Engineering Society.

Weblink:
https://www.ifrae-delft.com/workshop5
Contact Email: o.d.akinmade@tudelft.nl
c.wang-13@tudelft.nl

Topic: Pavement Monitoring and safety

Dr. Hao Wang is currently an Associate Professor and Graduate Program Director of Department of Civil and Environmental Engineering at Rutgers, The State University of New Jersey, USA. His research areas focus on sustainable and smart infrastructure materials and pavement system. He has been PI or Co-PI of more than 40 research projects sponsored by federal government and state agencies in U.S. He has received a number of awards including AASHTO High Value Research Award, Educator of The Year Award from ASCE New Jersey Section, “Wang, Binggang” Young Scholar Award, and Emerging Outstanding Academic from Academy of Pavement Science and Engineering (APSE). He serves as the chair of Mechanics of Pavement Committee at Engineering Mechanics Institute of ASCE, Associate Editor of Journal of Transportation Engineering Part B: Pavement, and editorial board member of several journals. He has advised 10 PhD graduates as major advisor since he joined Rutgers University in 2011.

Workshop Secretaries

Daniel graduated from the Department of Civil Engineering of the Federal University of Technology Minna, Nigeria in 2008. He joined the Faculty of Highway and Transportation Engineering of the Universiti Teknologi Malaysia (UTM) as a master's students. and graduated in 2011. He has been working as a Research Scientist with the Nigerian Building and Road Research Institute since 2011. Since November 2019, he joined the Section of Pavement Engineering at Delft University of Technology as a PhD researcher. Daniel is a member of the local organizing committee for IFRAE 2021 and also one of the secretaries to the workshop.

Chen graduated from Faculty of Materials Science and Engineering, Anhui University of Technology with Bachelor degree in 2017. He continued his Master study at the Faculty of Materials Engineering, Wuhan University of Technology and got his Master degree in 2019. Since October 2020, he has been working in the Section of Pavement Engineering at Delft University of Technology as a PhD researcher. Chen is a member of local organizing committee for IFRAE 2021 and also one of the secretaries to the workshop.

Contact Email: o.d.akinmade@tudelft.nl.

c.wang-13@tudelft.nl.

Phone number: +31-152782763

Weblink:

https://www.ifrae-delft.com/workshop5