

TITLE **Big Data Applications for Automated Driving Technology, Transportation Planning, and Engineering with Data Science and AI Technologies**
2019 SF Bay Area ITE/ITS CA Joint Transportation Workshop

DATE Thursday, April 25, 2019

TIME 8:30 a.m. - 5:00 p.m.

FEE \$44 ITE/ITS-CA Members
\$60 Non-Members
\$10 ITE Student/Unemployed/Retired Members
This fee includes a delicious buffet lunch and two coffee/tea breaks.

BACKGROUND Following the great success of our 10th Annual San Francisco Bay Area ITE/ITS-CA Transportation Workshops last year, with participants gathered from around the world, the San Francisco Bay Area ITE and ITS CA will host 2019 Annual Transportation Workshop, 11th SF Bay Area ITE Annual Workshop on Thursday, April 25, 2019 at San Francisco Municipal Transportation Agency (SFMTA). Our theme this year is "Big Data Applications for Automated Driving Technology, Transportation Planning, and Engineering." The objectives of this workshop are to show the trends of the freight and household travel big data technology, big data applications and methods, traffic controls-connected vehicles technologies and automated driving, big data sensors, innovative transportation improvement methodologies and analytic tools to our decision-makers, traffic engineers and transportation planners; how these tools can be applied to transportation planning and engineering projects; and what impacts these technologies are likely to have on travel demands, automated driving and investments on transportation infrastructure. Some benefits and pain points in the use of big data analytics for transportation projects will be discussed.



This year, speakers were invited from representatives of international transportation technology companies, connected and automated vehicle industry, ITS industries such as INRIX, AC Transit, Alibaba, AMG, AAA, Fehr & Peers and Moovit and UC Berkeley, who will talk about the current exciting technology development status, on-line and time-dependent transportation data and models, land use models linked to the transportation models, traffic control systems, and the traffic data collection technologies. The workshop aims at the technology developments from many transportation data industries and automobile companies, and their implications to the ITE and ITS community and lessons learned and challenges identified based on the latest data science and AI technologies.

Our San Francisco Bay Area ITE Section has more than 600 active ITE members, and ITS-CA includes over 150 organizations including public agencies, consultants, software and hardware providers, tolling agencies, transit providers, contractors, equipment manufacturers, and data firms. We expect more than 110 dedicated participants for this full-day workshop. You are invited to participate and propose a presentation on these topics or other topics of your interests. Based on the submissions, we will finalize our workshop program.



INTENDED AUDIENCE Auto Industry, Data Science and AI Firms, Big Data Companies, Urban and Transportation Planners, Demand Forecasting Modelers, Traffic Engineers/Transportation Planners, Consultants, Government Staff, Researchers, and Students

PRESENTERS Internationally renowned experts will join our own locally professionals to share the latest transportation data science, modeling technologies, research, and applications. Some speakers and topics last year are shown below.

- SCHEDULE**
1. 8:00 a.m.-9:00 a.m. (Registration)
 2. 8:45 a.m.-9:00 a.m.
Dr. Jia Hao Wu, W & S Solutions, LLC, Introduction to Big Data Technologies and Applications and this Workshop
 3. 9:00 a.m.-9:30 a.m. (Moderator A)
Gary Carlin, INRIX, Information: Big data, Open Data and Autonomous Vehicles
 4. 9:30 a.m.-10:00 a.m. (Moderator A)
Kam He, Alibaba, Smart City-Transportation Optimization Powered by Alibaba AI Technology
 5. 10:00 a.m.-10:30 a.m. (Moderator A)
Ahsan Baig, AC Transit, Big Data In AC Transit - Challenges, Opportunities, And Initiatives
 6. 10:30 a.m.-10:45 a.m. (Coffee Break)
 7. 10:45 a.m.-11:15 a.m. (Moderator A)
Francois Dion and Qijan Gan, UC Berkley, Integrated Corridor Management Systems: Impacts of Data Quality on Decision Making
 8. 11:15 a.m.-11:45 a.m. (Moderator A)
Habib Shamskhov, AMG, Introduction To Gomentum Station Program: Autonomous Vehicle Proving Grounds In The Largest Secure Connected Autonomous Vehicle Testbed In The World
 9. 11:45 a.m.-11:50 a.m. (Moderator A)
Sponsorship Presentation (Gold 1: Iteris)
 10. 11:50 a.m.- Noon
Workshop Group Photo
 11. Noon-1:00 p.m. (Lunch)
 12. 1:00 p.m.-1:30 p.m. (Moderator B)
Kris Hari Krishnan, AAA NCNU, Safe AV Development & Deployment
 13. 1:30 p.m.-2:00 p.m. (Moderator B)
Mike Wallace, Principal, Fehr & Peers: Latest Applications For Big Data Across Modes
 14. 2:00 p.m.-2:30 p.m. (Moderator B)
Frank Kopas, Moovit: Big Data for Multimodal Trip Planning
 15. 2:30 p.m.-2:40 p.m. (Moderator B)
Sponsorship Presentation (Gold 2: Traffic Cast)
Sponsorship Presentation (Gold 3: Traffic Patterns)
 16. 2:40 p.m.-2:55 p.m. (Coffee Break)
 17. 2:55 p.m.-3:25 p.m. (Moderator C)
Casey Littleton, Wejo: Big Data from the Connected Car (invited)
 18. 3:25 p.m.-3:35 p.m. (Moderator Jia Hao Wu, W & S Solutions)
Frank Penry, GHD Inc. Appreciations/Acknowledgments/Photos
 19. 3:35 p.m.-4:00 p.m. (Moderator C)
Panel Discussion: All Speakers and Others Who Want to Share

Moderator A: Josh Peterman, Fehr and Peers

Moderator B: Brian Burkhard, Jacobs

Moderator C: Joy Bhattacharya, AMG



INSTITUTE OF TRANSPORTATION ENGINEERS
San Francisco Bay Area Section

INTELLIGENT TRANSPORTATION SOCIETY OF CALIFORNIA

REGISTRATION

RSVP weblink: Click [here](#) to register.

If you have questions or suggestions, please direct general inquiries to the SF Bay Area ITE's Technical Program Chair, Dr. Jia Hao Wu at jiahao.wu@wssolutions.us. Walk-ins will be charged \$5 extra.

RSVP/CANCELLATION DEADLINE

The RSVP and cancellation deadline is Monday, April 22 at noon. Seating capacity is limited to 110. After the deadline, you may come as a walk-in participant.

LOCATION San Francisco Municipal Transportation Agency (SFMTA) at the 2nd Floor Atrium, One South Van Ness Avenue, San Francisco, CA 94103.

SPONSORSHIPS Only three Gold (\$525), two Silver (\$375) and three Bronze (\$275) sponsorships available for this Workshop. For more information, please contact Joe Ciccarelli at joseph.w.ciccarelli@gmail.com.

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