PRINCETON ACM / IEEE COMPUTER SOCIETY NOVEMBER 2023 JOINT MEETING

The Real Case for Autonomous Vehicle Mobility



Putting Driverless Vehicles to Use for Those Who Really Need a Ride

Driverless vehicles have a future in making the world better. Alain Kornhauser will discuss mobility technology and its role in improving people's quality of life. Today, there is significant inequality in the availability of mobility, so why can't new technology be employed to help level the mobility playing field? It's better than just being another toy for those that already have way too many toys. Alain will discuss the details of a specific proposed system – a Trenton mobility project called Mobility and Opportunity: Vehicles Equity System (MOVES) – to show what mobility might look like in places like Trenton and Mercer County.

Dr. Alain Kornhauser is Professor, Operations Research & Financial Engineering, and Chair, Princeton Autonomous Vehicle Engineering, at Princeton University. He has been studying the possibilities of rapid transit in the urban environment since the 1970s. As the progenitor of the Princeton Transportation Network Model, he was one of the early proponents of leveraging Geographic Information Systems in the study of transportation systems, and his work has had a significant effect on the North American freight railroad system. He founded ALK Technologies, Inc., which brought to market the roadway and railway systems digital map database credited as being used by the majority of North American railroad and trucking companies. More recently, he has turned his focus to autonomous taxi and urban transit to enable more widespread mobility.

On a personal view, Kornhauser describes himself as born prematurely six days after D-Day in Vichy France near Lyon to a French mother and a Ukrainian-born French prisoner of war father who had been captured at the Maginot Line in June 1940. He emigrated to the U.S. in 1951 through Ellis Island and was raised in Pittsburgh, PA. He was educated at Penn State and Princeton in Aerospace Engineering. His career as a teacher and researcher started in January 1971, and he is now in his fifty-second year as a faculty member at Princeton. The hallmark of his career has been "the application of automation to improve mobility and quality of life in cities."

Kornhauser's book, "The Real Case for Driverless Mobility: Putting Driverless Vehicles to Use for Those Who Really Need a Ride," will be published by Elsevier in January 2024.

Date:	Thursday, November 16, 2023, 8:00 pm EDT (Note: Refreshments and networking start early – at 7:15 pm.)
Place:	HYBRID MEETING (both in-person and online)
In-person: Princeton University Computer Science Building	
	Small Auditorium, Room CS 105
	35 Olden Street, Princeton NJ
How to register for the online meeting:	
•	Send email to PrincetonACM@gmail.com
•	OR Register on Meetup.com
(http://meetup.com/IEEE-Princeton-Central-Jersey-Section)	
Informa	ation: Dennis Mancl (908) 285-1066
On-line info: http://PrincetonACM.acm.org	

Princeton ACM / IEEE Computer Society meetings for the 2023-24 season will be "hybrid". You have a choice: attend the talk in-person, or view the meeting online from home. To join the online, you must register in advance, and you will receive an email with instructions for how to connect to the talk.

All Princeton ACM / IEEE Computer Society meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 5:45 p.m. at Applebee's (3330 US 1, Lawrenceville, near Quakerbridge Mall). Please send email to **princetonacm@gmail.com** in advance if you plan to attend the dinner.