

Analysis of SHRP2 Data to Understand Normal and Abnormal Driving Behavior in Work Zones

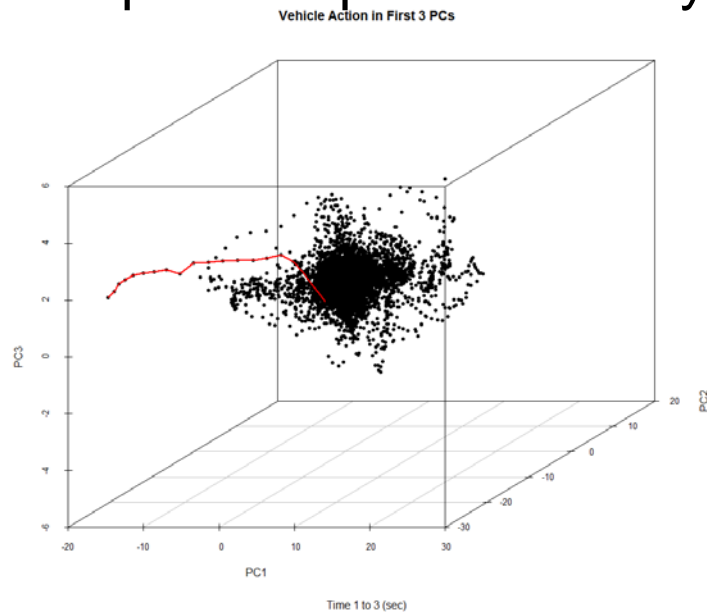
Chalmers & University of Michigan

Sponsor: US Dept of Transportation (Federal Highway Administration)

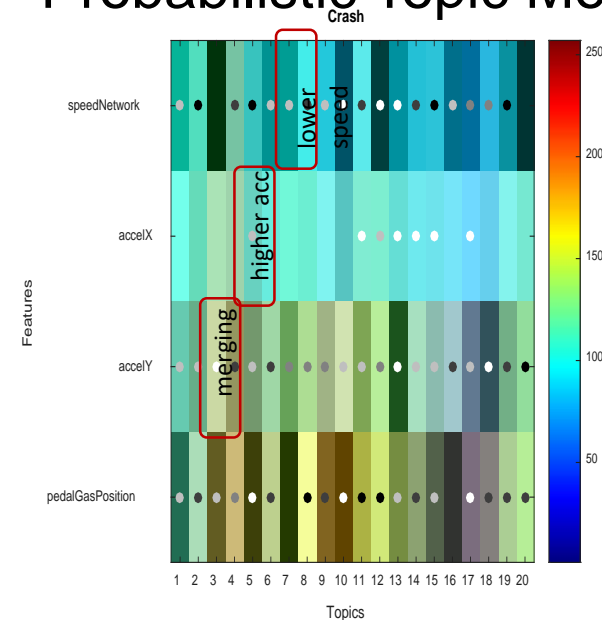
Focus: Methods and metrics of normal driving behavior to identify abnormal driving behavior in contrast

Application: Work zone safety

Principal Components Analysis

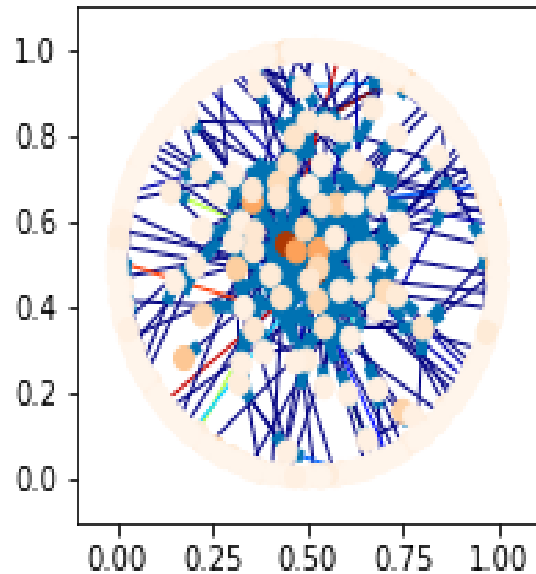


Probabilistic Topic Modeling

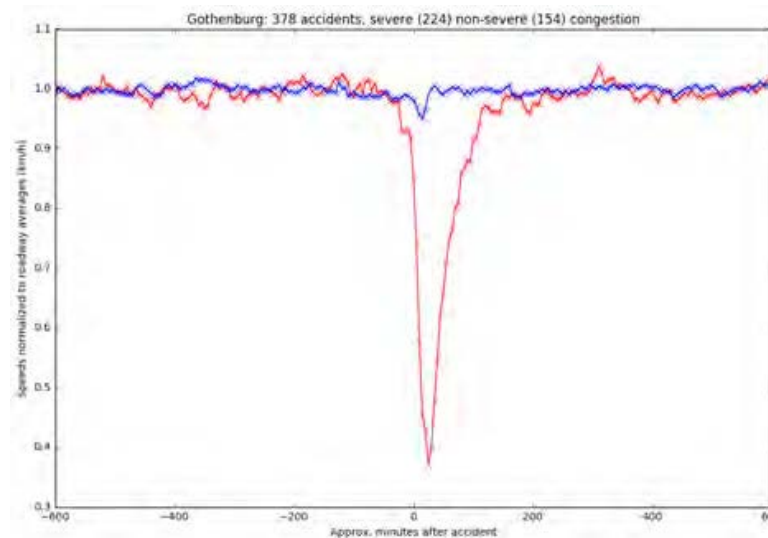


Big & Continuous Data Improves Our Understanding of Mobility and Paves the Way for an Energy Transition

1 **Mobility** patterns of 18 cities and 7 countries



2 **Traffic flows**, congestion, accidents and incidents, and their interrelationships



3 **Agent-based model** of the **behavioural changes** that would accompany high adoption rates of *shared/ autonomous/electric vehicles (EVs)*

Synthetic Sweden



CHALLENGES AND NEEDS IN FUTURE CIRCULAR MATERIAL SYSTEMS FOR ELECTRIC AND AUTONOMOUS VEHICLES

PURPOSE

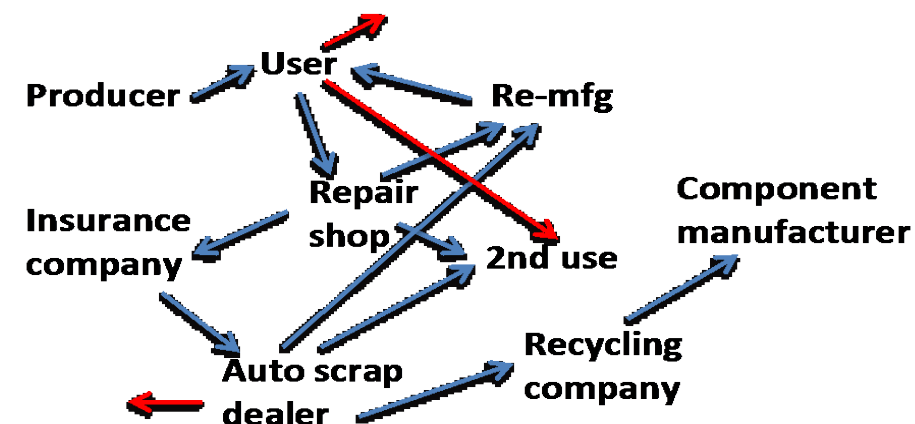
Identify future challenges of recycling processes and supply chain systems, triggered by the development of electric and autonomous vehicles.

- Roadmap and guidance
- Specifics on batteries and glass

PROBLEM

Development triggers an increased use of complex materials, and combinations of them, for reason of weight, functionality, etc.

Such components need both efficient recycling processes and effective recycling supply chains.



Britt-Marie Steenari, Burcak Ebin, Mats Johansson, Martin Kurdve

Mixed Methods for the Biography of a Street

Useable Pasts for Urban Mobility Transitions

Martin Emanuel, Per Lundin

Technology management and organization

DATUM 81-03-11 SIDAN 22

STRÄCKOR I HUVUDSTÄDET VARIABEL: RR TRAFIKOLYCKOR I GÖTEBORG 1971-79

NR	PLATS	OLYCKOR TOTALT	OLYCKOR KVOT I URVAL	1971 1972 1973 1974 1975 1976 1977 1978 1979											
				1971	1972	1973	1974	1975	1976	1977	1978	1979			
264	LINNEGATAN	192	100	192	0	17	17	14	18	28	23	28	19	28	
271	LINNEGATAN														
265	LINNEGATAN	2	100	2	0	1	0	0	0	1	0	0	0	0	
242	ÖVRE HUSARGATAN														
265	LINNEGATAN	13	100	13	0	2	2	0	1	0	2	3	2	1	
267	LINNEGATAN														
266	VÄRMLANDSGATAN	29	100	29	0	3	3	4	0	5	7	3	4	0	
271	LINNEGATAN														
266	VÄRMLANDSGATAN	65	100	65	0	14	8	8	8	9	9	3	2	4	
281	VÄRMLANDSGATAN														
267	LINNEGATAN	13	100	13	0	2	0	3	0	1	2	1	3	1	
264	ÖVRE HUSARGATAN														
267	LINNEGATAN	9	100	9	0	1	0	2	0	0	2	1	2	1	
264	LINNEGATAN														
271	LINNEGATAN	91	100	91	0	6	10	15	15	16	7	10	6	0	
5473	JÄRNTORGET														
281	VÄRMLANDSGATAN	13	100	13	0	0	0	0	0	0	0	2	4	7	
5472	JÄRNTORGET														
281	VÄRMLANDSGATAN	31	100	31	0	7	3	3	4	9	5	0	0	0	
5479	FÖRSTA LÄNGGATAN														
				458	100	458	0	53	43	49	46	69	57	31	42

Quantitative data

Archive material



Images



Autonomous and Connected Trucks for Electric Distribution (ACTED)



Balázs Kulcsár Henk Wymeersch

Electrical Engineering
Chalmers

Sönke Behrends Iván Sánchez-Díaz

Technology Management and Economics
Chalmers

Michael Browne Jon Williamsson

Industrial and Financial Management & Logistics
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Purpose: To integrate **urban logistics, business modeling, and control with communication engineering** to study the use of ACTED for urban freight transport.

Focus: Medium-duty trucks operating from distribution centers to urban environments and smaller vehicles distributing the last-mile within large traffic generators.

Dates: 2018-2019