

Connected Vehicle Workshop

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Introduction

- Wireless access technologies have matured in recent years
- Transportation engineering has also evolved from a “brick and mortar” discipline to embrace information and communication technologies
 - ⇒ Intelligent Transport Systems (ITS)
- Connected Vehicles
 - ⇒ use of wireless technologies to connect vehicles with each other or with roadside infrastructure
 - ⇒ Cooperative vehicle systems (CVS); vehicles in the loop
- CVS can improve transportation safety, smooth traffic flow, reduce road congestion, lower trip time, reduce CO₂ emission, keep drivers informed, entertain passengers



AUTO21 Project F303-FVT: Vehicular Telematics over WiFi and WiMax Multihop Networks

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U Ottawa: Oliver Yang (SITE)

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Our Partners



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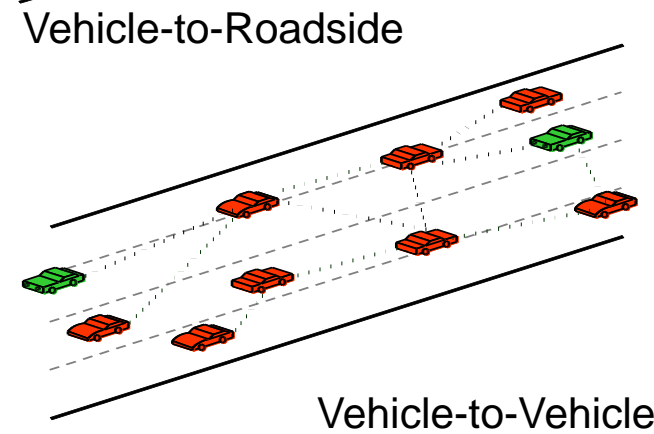
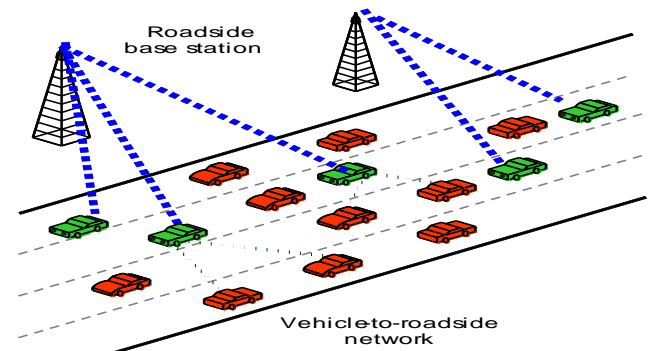
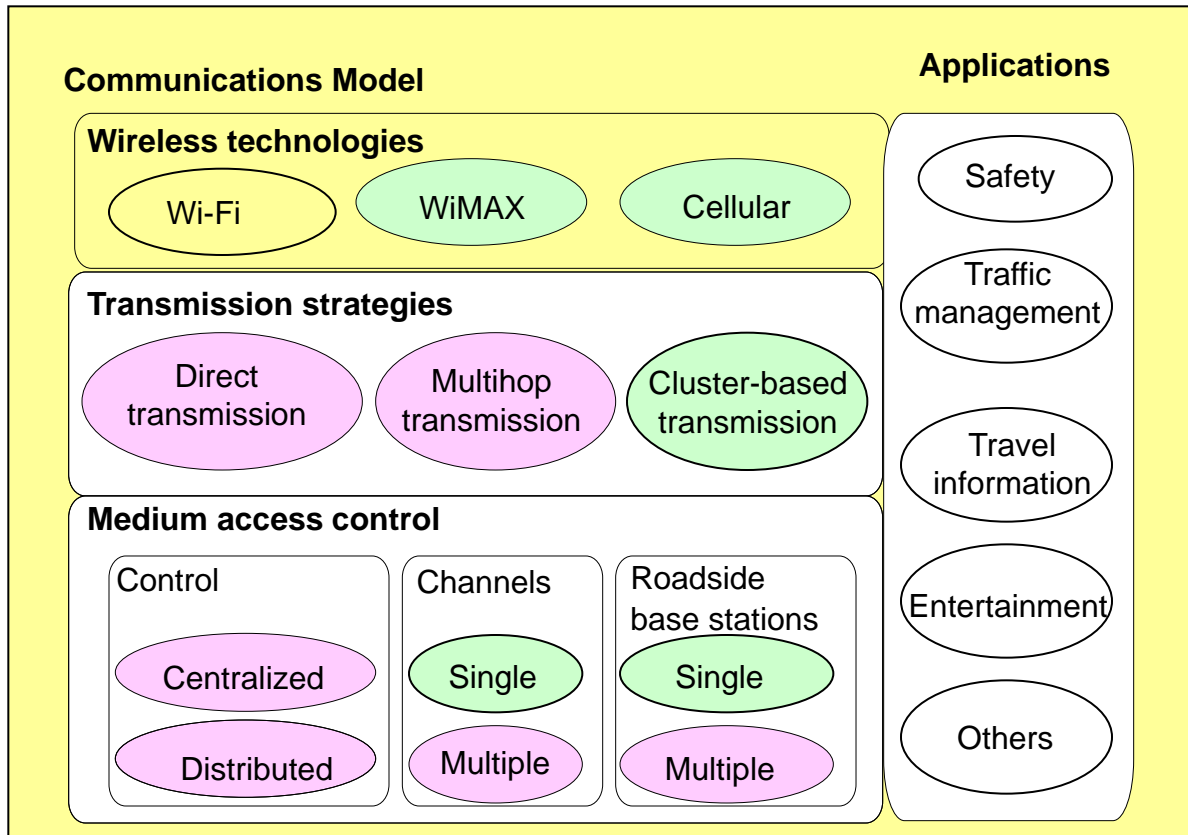
*Meth*usala Microcells

NOKIA
Connecting People

NOVAX



Advanced Heterogeneous Vehicular Communications Platform (AVCP)



Auto21
TM/AC



NSERC DIVA Strategic Research Network: Developing Next Generation Vehicular Networks and Applications

Members:



Carleton
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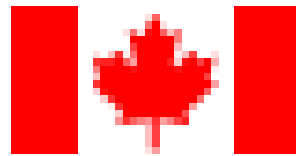


NSERC DIVA Projects at UBC

- **Heterogeneous vehicle-to-vehicle and vehicle-to-infrastructure system integration and evaluation strategies**
- **Harnessing vehicular social networks for crowd-sensing**
- **Intelligent transportation applications supporting secure and efficient movements of freights**
- **Secure and trusted terminals and network infrastructure**



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Plan for UBC Connected Vehicle Test Bed



- Database Servers
- Software Development Lab
- Operations Centre
- WiMax Base Stations (BTS)
- Roadside Units (RSU)
- 1 Transportable Equipment Shelter
- 1 Test Van (existing)
- 20+ Onboard Units (OBU)

Partnerships and collaborations invited



Thank you!

Victor Leung

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