#### Home » News & Events

# **Using GPS Mobile Phones as Traffic Sensors**

- February 8, 2008: 4:00pm 5:00pm
- Location: 290 HMMB, the Maria & Dado Banatao Conference Room, UC Berkeley

Alexandre M. Bayen, Professor of Civil and Environmental Engineering, UC Berkeley EXPERIMENT FACT SHEET

Navigation

## News & Events

- <u>Upcoming</u> <u>Events</u>
- <u>Research</u>
  <u>Exchanges</u>
- Past Events
- <u>News</u>
- <u>Calendar</u>
- <u>CITRIS</u>
  <u>Distinguished</u>
  <u>Speakers</u>
- <u>CITRIS On</u> <u>YouTube</u>

The convergence of communication and multi-media platforms has enabled a key capability: mobility tracking via GPS. Business plans of most major cellular phone manufacturers such

as Nokia include embedding GPS in all manufactured cell phones within less than 18 months. Thus, a high penetration rate of GPS-equipped travelers on freeways is expected in the near future. This has major implications for the traffic engineering community, which currently monitors traffic using mostly fixed sensors such as cameras and loop detectors, or location specific sensors such as FasTrak or EZ-pass transponders.

This seminar will present a prototype of location-based service: real-time traffic monitoring using cellular phones only. The seminar will take place while the field experiment "<u>Using GPS Mobile Phones as Traffic Sensors</u>" is in progress: 100 vehicles carrying a GPS-equipped Nokia N95 cell phone will drive along a 10-mile stretch of I-880 between Hayward and Fremont, California.

#### Click here for a pdf version of the Mobile Century Guest program.

This event is sponsored by CITRIS, UC Berkeley, <u>Nokia</u>, <u>CalTrans</u>, the <u>California</u> <u>Center for Innovative Transportation</u> (CCIT), the <u>Institute for Transportation Studies</u> (ITS),

University of California Transportation Center, VOLVO Center for Future Urban Transport, the National Science Foundation, and Tekes.



### Presentations





## Video from Alex Bayen's talk

 $\odot$ 

Last Updated: May 14, 2008 - 10:10am

- <u>CITRIS HQ</u>
- <u>Seminar</u>
- <u>UC Berkeley</u>
- <u>Calendar</u>

•

- <u>About</u>
  - Mission Statement
  - <u>History</u>
  - Funding
    - <u>Grants and Funding Opportunities</u>
  - <u>Leadership</u>
    - <u>CITRIS Acting Director: Paul Wright</u>
    - <u>CITRIS Director, UC Davis: S. J. Ben Yoo</u>
    - <u>CITRIS Director, UC Merced: Jeff Wright</u>
    - <u>CITRIS Director, UCSC: Patrick Mantey</u>
    - CITRIS Chief Scientist, UC Berkeley: Prof. Ming Wu
    - <u>CITRIS Chief Scientist, UC Davis: Thomas Nesbitt</u>

- <u>CITRIS Chief Scientist, UC Merced: German Gavilan</u>
- CITRIS Director of Finance and Operations: Heidi Hallett
- CITRIS Director of Development: Anthony St. George
- All CITRIS Leaders

• <u>Staff</u>

- <u>Visitor Information</u>
  - Campus Map
  - Directions
  - Parking
  - Transportation
  - Accommodations
- Capital Projects
- Intellectual Property
  - BSD License Agreement
  - CITRIS & IP (pdf)
  - <u>CITRIS Patent Acknowledgment</u>
  - Corporate Participation Guidelines (pdf)
- <u>FAQ</u>
  - How to
- <u>Research</u>
  - Art, Technology and Culture
  - Computational Science and Engineering
  - Delivery of Health Care
  - Energy and the Environment
  - Intelligent Infrastructure
  - Services Science and Technology
  - Technology for Emerging Economies
  - Browse All Projects
  - Browse Researchers
  - Seed Funded Projects
  - Funding
    - Funding Overview
    - Seed Funding Forum
    - Help for Faculty
- Partners
  - Corporate Partners
    - Founding Corporate Members
    - Platinum Corporate Members
    - Associate Corporate Members
    - <u>Affiliate Centers' Corporate Members</u>
    - IAB Presentations
    - <u>Help for Faculty</u>
  - <u>Campuses</u>
    - UC Berkeley
    - UC Davis
    - UC Merced
    - UC Santa Cruz
  - $\circ$  <u>Centers</u>
  - California Institutes for Science & Innovation
- <u>News & Events</u>
  - <u>Upcoming Events</u>

- <u>Research Exchanges</u>
  - <u>Fall 2008</u>
  - Spring 2008
  - All Research Exchanges
- Past Events
- <u>News</u>
- <u>Calendar</u>
- CITRIS Distinguished Speakers
- CITRIS On YouTube
- Publications
  - All Publications
  - Articles
  - <u>Newsletters</u>
  - $\circ$  <u>Presentations</u>
  - CITRIS Logos & Templates
    - <u>CITRIS Poster Template</u>
    - PowerPoint Template File
  - Internal Resources
- Contact Us
- •
- •