
MobiSys 2004 Conference Review



Presented by:

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Conference Overview

- June 6- 9, 2004 in Boston, Massachusetts



- <http://www.sigmobile.org/mobisys/2004/>

Conference Overview

- 2nd International Conference on Mobile Systems, Applications and Services
- Sponsored by ACM Sigmobile and USENIX
- General Chairs: Guru Banavar, IBM Research and Willy Zwaenepoel, EPFL
- Program Co-Chairs: Doug Terry, Microsoft Research and Roy Want, Intel Research

Conference Overview

- 2 workshops (Novel Applications Based on Mobile Embedded Systems, Context Awareness)
- 22 papers, 8 posters, 8 demos, 3 videos
- Birds of a Feather session

Birds of a Feather: Mobile PlanetLab

- PlanetLab – www.planet-lab.org



Day 1: June 7, 2004

- *Keynote Address: Human Needs and Mobile Technologies: Small, fast and fun*
- Ben Shneiderman, University of Maryland
- www.cs.umd.edu/hcil/newcomputing
- <http://mitpress.mit.edu/leonardoslaptop>
- Designing the User Interface: www.awl.com/DTUI
- www.cs.umd.edu/hcil/iHealth/
- www.cs.umd.edu/class/spring2004/cmssc434/

S1: Energy Conservation for Mobile Devices

- Session Chair: Carla Ellis, *Duke University*
- NWSLite: A Light-Weight Prediction Utility for Mobile Devices
 - www.cs.ucsb.edu/~racelab
- uSleep: A Technique for Reducing Energy Consumption in Handheld Devices
- Ghosts in the Machine: Interfaces for Better Power Management
 - Best paper award

S2: Mobile Applications

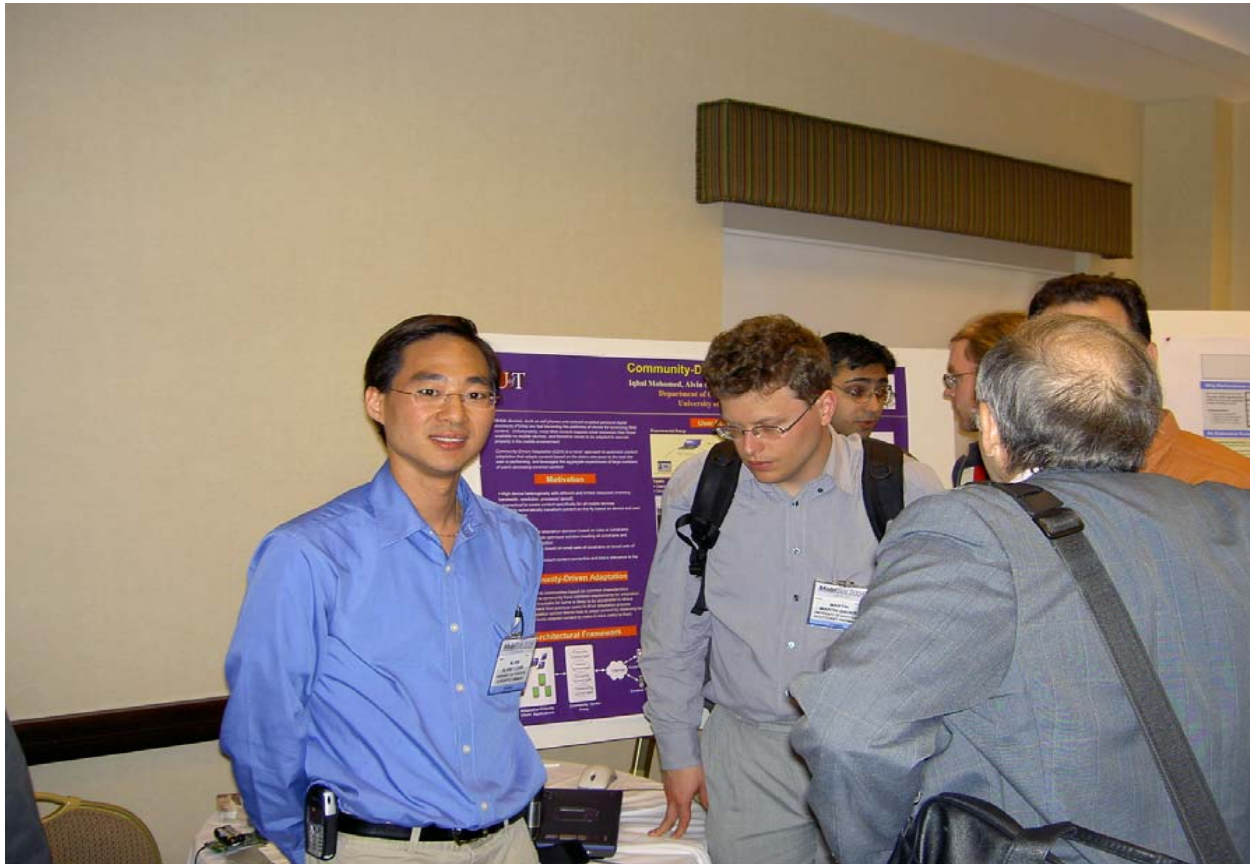
- Session Chair: Brian Noble, *University of Michigan*
- Metadata Creation System for Mobile Images
 - Garage.sims.berkeley.edu, www.hiit.fi/risto.sarvas
- Bluetooth and WAP Push Based Location-Aware Mobile Advertising System
 - www.rotuaari.net
- Impromptu: Managing Networked Audio Applications for Mobile Users
 - geek@media.mit.edu, www.media.mit.edu/speech, impromptu.media.mit.edu

S3: Communication over Wireless LANs

- Session Chair: Victor Bahl, *Microsoft Research*
- Improving the Latency of 802.11 hand-offs using Neighbor Graphs
- DOMINO: A System to Detect Greedy Behavior in IEEE 802.11 Hotspots

Poster, Demo, Video and Reception

- Our poster: Community-Driven Adaptation



Poster, Demo, Video and Reception

- Other notable posters:
 - Place Lab: Ubiquitous Device Positioning using WiFi and other Radio Sources, Intel
 - A Context-Aware Content Delivery Service Using Off-the-shelf Sensors, Univ of Tokyo
 - Proxy to amalgamate HTTP requests to conserve battery power, Intel
- Demos:
 - Combined face and speaker identification on a handheld device, MIT
 - Audio Location, Intel
 - Camera-phones as devices to enhance human-computer interaction, Intel

Day 2: June 8, 2004

- *Keynote Address: Talking Phones: a cultural reading of mobile technologies*
- Genevieve Bell, Intel Research
- http://www.intel.com/research/people/bios/bell_g.htm

S4: Wireless Sensor Networks

- Session Chair: Hari Balakrishnan, MIT
- Hood: A Neighborhood Abstraction for Sensor Networks
- Intelligent Fluid Infrastructure for Embedded Networking
- Impact of Radio Irregularity on Wireless Sensor Networks

S5: Mobile Data Management

- Session Chair: Eyal De Lara, University of Toronto
- Middleware Support for Reconciling Client Updates and Data Transcoding
- Exponential Index: A Parameterized Distributed Indexing Scheme for Data on Air
- Mimic: Raw Activity Shipping for File Synchronization in Mobile File Systems

S6: Support for Location

- Session Chair: Gaetano Borriello, University of Washington
- An Architecture for Privacy-Sensitive Ubiquitous Computing
- Tracking Moving Devices with the Cricket Location System

RFID Panel Discussion

- Chair: Steven Schafer, Microsoft
- Paul Moskowitz, IBM
- Mark Ulrich, PepsiCo
- Bob Ippolito, Masters of Branding
- Henry Holtzmann, MIT

Day 3: June 9, 2004

- No keynote, only morning

S7: Exploiting Path Diversity in Mobile Systems



- Session Chair: Roy Want, Intel Research
- Divert: Fine-grained Path Selection for Wireless LANs
 - <http://nms.csail.mit.edu/divert>
- MAR: A Commuter Router Infrastructure for the Mobile Internet
- A Mechanism for Host Mobility Management supporting Application Awareness

S8: Wide-area Monitoring of Mobile Objects

- Session Chair: Mary Baker, HP Labs
- Electronic Shepherd - a Low-Cost, Low-Bandwidth, Wireless Network System
- Implementing Software on Resource-Constrained Mobile Sensors: Experiences with Impala and ZebraNet
- Energy-Efficient Surveillance System Using Wireless Sensor Networks

Our overall comments

- Fairly well organized conference
- Some good papers, others not so good (questionable how they were selected)
- Poster/demo/video reception had some challenges
- Good conference to meet the big names in mobile and ubiquitous/pervasive computing

Lessons learned in Poster Session

- Bring your own supplies (sticky tape, scissors, pins, poster gum, cardboard, etc.).
- Bring small version of your poster to give away to interested folks.
- Bring other informational handouts (if you have a paper, for instance).
- Physical objects are cooler than posters. Almost all poster presenters had something that was non-paper to show to people.

Resources

- Slides available at:
 - <http://www.cs.toronto.edu/~achin/Conferences/presentations/mobisys04.pdf>
- Also on reading group web site (TBD)
- All papers from MobiSys available on ACM web site (can access from U of T library web account)