Darshan Santani

Idiap Research Institute, Switzerland

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EDUCATION PhD in Electrical Engineering

July'12 - Present

EPFL, Lausanne, Switzerland Thesis Advisor: Daniel Gatica-Perez

MSc in Management, Technology, & Economics

March 2012

ETH, Zurich, Switzerland

Thesis: "Urban Information System for the Real-Time City"

Bachelor of Engineering (B.E.) in Computer Science & Engg.

July 2006

Manipal Institute of Technology, India

Thesis: "Internationalization and Architecture Enhancement on Printing

Mechanisms in Firefox Web browser"

RESEARCH EXPERIENCE Social Computing Group, Idiap Research Institute, EPFL July'12 - Present

Research Assistant

Supervisors: Daniel Gatica-Perez, Idiap Research Institute, Switzerland

IBM Research Africa, Nairobi

June'14 - Sept'14

Research Intern, "CommuniSense: Crowdsourcing Road Hazards in Nairobi"

Supervisors: Reginald Bryant, Osamuyi Stewart, IBM Research

Wearable Computing Lab, ETH, Zurich

June'11 - Sept'11

Research Intern, "Design and Development of CoenoSense Backend Platform"

Supervisors: Martin Wirz, Prof. Gerhard Troster, ETH Zurich

SENSEable City Lab, MIT, Boston

Oct'10 - April'11

Research Student, "LIVE Singapore!"

Project Page: http://senseable.mit.edu/livesingapore/

Supervisors: Carlo Ratti, Krisitian Kloeckl, MIT

Microsoft Research Asia, Beijing

June'10 - Oct'10

Research Intern, "Towards Urban Computing with GPS-Equipped Taxis"

Supervisor: Yu Zheng, Lead Researcher, MSRA

School of Information Systems, SMU, Singapore

Sep'07 - Aug'09

Research Engineer, "Spatio-temporal efficiency of a Taxi Dispatch System"

Supervisors: Rajesh K. Balan & C. Jason Woodard, SMU

School of Information Systems, SMU, Singapore

Feb'07 - Aug'09

Research Engineer, "Kuala: Computational Modeling Tools"

Supervisor: C. Jason Woodard, SMU

Industrial Experience RedHat Inc.

Feb'06-Aug'06

Software Engineer, Engineering Services and Operations Group, India

Project Title: "Internationalization and Architecture Enhancement on Printing Mech-

anisms in Firefox Web browser"

PUBLICATIONS

- Salvador Ruiz-Correa, Darshan Santani, Beatriz Ramirez Salazar, Itzia Ruiz Correa, Fatima Alba Rendon-Huerta, Carlo Olmos Carrillo, Brisa Carmina Sandoval Mexicano, Angel Humberto Arcos Garcia, Rogelio Hasimoto Beltran and Daniel Gatica-Perez "SenseCityVity: Mobile Sensing, Urban Awareness, and Collective Action in Mexico" IEEE Pervasive Computing (Forthcoming), 2016
- Darshan Santani, Salvador Ruiz-Correa, Daniel Gatica-Perez "Looking at Cities in Mexico with Crowds" in Proceedings of the ACM Symposium on Computing for Development (ACM-DEV), 2015
- Darshan Santani, Daniel Gatica-Perez "Loud and Trendy: Crowdsourcing Impressions of Social Ambiance in Popular Indoor Urban Places" in Proceedings of the ACM Multimedia (MM'15), 2015
- Darshan Santani, Jidraph Njuguna, Tierra Bills, Aisha W. Bryant, Reginald Bryant, Jonathan Ledgard, Daniel Gatica-Perez "CommuniSense: Crowdsourcing Road Hazards in Nairobi" in Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI), 2015
- Salvador Ruiz-Correa, Darshan Santani, Daniel Gatica-Perez "The Young and the City: Crowdsourcing Urban Awareness in a Developing Country" in *Proceedings of* the Urb-IoT, 2014
- Darshan Santani, Daniel Gatica-Perez "Speaking Swiss: Languages and Venues in Foursquare" in *Proceedings of the ACM Multimedia (MM'13)*, 2013
- Darshan Santani, Daniel Gatica-Perez "Revisiting the Generality of the Rank-based Human Mobility Model" in *Adjunct Proceedings of Ubicomp'13*, 2013
- Stephan Karpischek, Darshan Santani, Florian Michahelles, "Usage Analysis of a Mobile Bargain Finder Application" in Proceedings of the 13th International Conference on Electronic Commerce and Web Technologies (EC-WEB), 2012
- Siddharth Sanan, Darshan Santani, K. Madhva Krishna, Henry Hexmoor, "Extension of Reeds & Shepp Paths to a Robot with Front and Rear Wheel Steer" in Proceedings of the 2006 IEEE International Conference on Robotics and Automation (ICRA), 2006

Posters and Demos

- Jidraph Njuguna, Darshan Santani, Tierra Bills, Aisha W Bryant, Reginald Bryant, "Citizen Engagement and Awareness of the Road Surface Conditions in Nairobi, Kenya" in Proceedings of the Fifth ACM Symposium on Computing for Development (ACM DEV), 2014
- Darshan Santani, Daniel Gatica-Perez "#-grams: Twitter Pulse from Hashtag Co-Occurrence Networks" in ACM Web Science Data Visualization Challenge, 2014 (Best Student Award)
- Darshan Santani, Rajesh Krishna Balan, C Jason Woodard, "Understanding and Improving a GPS-based Taxi System" at the Sixth International Conference on Mobile Systems, Applications, and Services (MobiSys), 2008

TECHNICAL REPORTS

- Yin Zhu, Yu Zheng, Liuhang Zhang, Darshan Santani, Xing Xie, Qiang Yang "Inferring Taxi Status Using GPS Trajectories", 2011
- Darshan Santani, Yu Zheng, Chih-Chieh Hung, Wen-Chih Peng, Xing Xie "Towards Urban Computing with GPS-Equipped Taxis", 2010
- Darshan Santani, Rajesh Krishna Balan, C Jason Woodard, "Spatio-temporal Efficiency in a Taxi Dispatch System", 2007

PATENT

Darshan Santani, Dr.B.H.S. Thimmappa, MIT Manipal "An Improved Process for the Recovery of Metallic Silver from Photographic Wastes", Indian Patent (532/CHE/2004A)

Teaching

Teaching Assistant, Computational Social Media (PhD Course) Spring 2015, 2016 Department of Electrical Engineering (EDEE), EPFL, Switzerland

SCHOLARSHIPS AND AWARDS

- ACM Multimedia (ACM MM) Travel Grant, 2015
- "Best Student Award" in ACM Web Science Data Visualization Challenge, 2014
- "SUN Scholarship", CEU Summer University, 2008
- Red Hat "Lord of the Codes" Scholarship, awarded by RedHat in collaboration with IIT-Bombay, 2005
- "All India Scholarship" EEI(Delhi), 2000

TECHNICAL SKILLS

- Programming Languages: R, Java, Python, Processing
- Operating Platforms: Linux/Unix, Windows

Undergraduate Achievements

- Design project titled "A simple device for the insertion of a thread into a needle" selected amongst *Top 10 Designs* in the "Open Design Contest" at IIT-Bombay's international technical festival, Techfest'05, 2005
- Won the 1st prize in a technical competition involving the design of complex mazes "Gone in 15 seconds" at IIT-Bombay's Techfest'05, 2005
- Won the Robotics competition organized by IEEE, MIT Manipal, 2014
- Won the 1st Prize in "Math Modeling Contest" at TechDay 2K4, MIT Manipal, 2004
- Design project titled "Synthesis and Fabrication of Logarithmic Spiral Function Generator" selected amongst Top 20 Designs in the "Open Design Contest" at IIT-Bombay's international technical festival, Techfest'04, 2004