Sandesh Uppoor

——— Career Highlights

- Currently working as Postdoctoral researcher at Orange Labs R&D, Paris.
- Member of SelfNet project team of INRIA Alcatel-Lucent Bell Labs common lab.
- Worked in SCALUS European Union funded research (FP7) project.
- Worked in TRAFIC project during my masters. TRAFIC project was supported by the French National Research Agency.

Education

- 2010 2013 PhD in Telecommunication, Institut National des Sciences Appliquées de Lyon (INSA).
- 2007 2009 Master of Technology in Network Engineering, Manipal Institution of Technology (MIT), Manipal University, CGPA: 8.3/10.
- 2006 2007 Post Graduate Diploma in Software Engineering, NIIT, Udupi, India, Grade: Excellent.
- 2002 2006 Bachelor of Engineering in Electronics and Telecommunications, VTU, Belgaum, India, Grade: First Class.

Work Experience Summary

- April. 2014 Post-Doc, Orange Labs R&D, France,
 - Present Exploiting large-scale telecom data to understand mobility and activity pattern of anonymous subscribers. Hadoop framework is used for storing and processing this BigData with Hive and Pig as languages..
 - Oct. 2010 PhD, French National Institute for Research in Computer Science and Control (INRIA), France,
 - Nov. 2013 Understanding the mobility behaviour of wireless smart devices (particularly In-vehicle devices) and their effect on Quality of Service in both ad-hoc and cellular network perspective. Skill acquired during this experience are problem analysis, problem solving, collaboration, mentoring.
 - Feb Aug Early Stage Researcher, Foundation for Research and Technology Hellas (FORTH-ICS), 2010 Greece,
 - Responsible for the development of efficient data synchronisation techniques between mobile devices using cloud computing. Skill acquired during this project are Python, XML, HTML, Protocol buffers.
 - Feb Jun Lecturer, MIT, Manipal India,
 - 2009 Teaching and assisting under graduate students in computer networking laboratory experiments. Evaluation, time management and leadership skills were few things which I developed.
 - Jun Dec Research Intern, ESIGELEC-IRSEEM, France,
 - 2008 Involved in design and experimentation of autonomous network protocols. Skills acquired with this experience are C++, NS-2, working on Linux systems.
 - Aug 2007 Teaching Assistant, MIT, Manipal India,
 - May 2008 Monitoring under graduate students with laboratory experiments apart from course work. This gave an in-depth knowledge on working with real network devices like cisco routers, switches, EMC^2 Storage management tools.

Technical skills and Interest

- Languages Python, C, C++, Java [used for extending Hive functionality]
- Experience Big Data processing with Hadoop, Hive, Pig, XML, HTML, Google Protocol buffers, SQL, AWK, Gnuplot, LaTeX
- Emulators EURECOM's OpenAirInterface [OpenAirLTE]
 - Working Autonomous networks (Vehicular, Pedestrian), Network mobility, Access networks, Telecom Data Area analysis, Prediction models, Mobility models.

Book chapters

- S. Uppoor, M. Fiore, J. Harri, "Synthetic mobility traces for vehicular networking", Vehicular Networks, H. Labiod and A.-L. Beylot (Editor), pp.209-245, **John Wiley & Sons**, ISBN: 9781848214897.
- P. Manzoni, M. Fiore, S. Uppoor, F.J. Martinez Dominguez, C.T. Calafate, J.C. Cano, "Mobility Models", C. Campolo, A. Molinaro, R. Scopigno (Editors), **Springer**, **2014.**

Publications

- S. Uppoor, M. Fiore, "Characterizing pervasive vehicular access to the cellular RAN infrastructure: an urban case study", IEEE Transactions on Vehicular Technology (to appear).
- S. Uppoor, O. Trullols-Cruces, M. Fiore, J.M. Barcelo-Ordinas "Generation and Analysis of a Large-scale Urban Vehicular Mobility Dataset", **IEEE Transactions on Mobile Computing**, ISSN: 1536-1233,TMC.2013.27.
- Sandesh uppoor, Marco Fiore, "Insights on metropolitan-scale vehicular mobility from a networking perspective", In ACM HotPlanet 2012, 2012, Low Wood Bay, UK.
- Sandesh uppoor, Marco Fiore, "Large-scale Urban Vehicular Mobility for Networking Research", In Proc. IEEE Vehicular Networking Conference 2011, Amsterdam, The Netherlands, November 2011.
- Sandesh uppoor, Manohara Pai MM, Mounir Boussedjra, Joseph Mouzna "Scalable Routing Technique using Road Hierarchy for Vehicular Networks", In Proc IEEE(France section) 9th International Conference on ITS Telecommunications, October 20-22, Lille, France, 2009.
- Sandesh uppoor, Joseph Mouzna, Mounir Boussedjra, Manohara Pai MM, "Density Aware Routing Using Road Hierarchy for Vehicular Networks", In Proc 5th IEEE International Conference on Service Operations, Logistics and Informatics, July 22-24, Chicago, U.S, 2009.

Short papers, Posters and Talks

- [Poster & Uppoor, Sandesh and Fiore, Marco, "MobiCom 2011 poster: vehicular mobility in large-scale Journal] urban environments", October 2011, New York, USA.
 - Talk & "A large-scale urban vehicular mobility trace for network research,"
 - Paper] @Journees Nationales des Communications dans les Transports Terrestres, Colmar, France.
 - @4th COST IC1004 MC and Scientific Meeting, Lyon, France.
 - @14èmes Rencontres Francophones sur les Aspects Algorithmiques de Télécommunications (Algotel 2012), France, May 2012.
- [Poster & Sandesh uppoor, Michail D. Flouris, Angelos Bilas, "Cloud-based Synchronization of Distributed Short paper] File System Hierarchies", In Proc IEEE International Conference on Cluster Computing 2010, September 20-24, Heraklion, Greece, 2010.
- [Talk & Case "The Effect of the MS Speed on the Traffic Performance of an Integrated Mobile WiMAX and Study DSRC Multimedia Networks on the Highway", Manipal University Report]

Extra-Curricular Activities

- [Demo] "Scalable mobility over cellular networks", Bell Labs Open Days 2012, Bell Labs Research Center, Villarceaux France. May 2012.
- [Demo] "Network Node using GPS" in International Conference on Advances in Information and Communication Technologies (ICICOT 07) held in Manipal on December 2007.
- [Tutorial] "Use of Network Simulator 2" in National Level Workshops "PING 2008", "PING 2009" organized by Manipal Institution of Technology.