

MULTIPOS
D6.10 Version 1.0
List of Third Year Publications

Contractual Date of Delivery:	<i>T₀ + 36 (months)</i>
Actual Date of Delivery:	<i>T₀ + 40</i>
Editor:	<i>Jari Nurmi</i>
Author(s):	<i>Jari Nurmi, Francescantonio Della Rosa, Pedro Silva, Tommi Paakki</i>
Participant(s):	<i>TUT</i>
Work package:	<i>WP6</i>
Version:	<i>1.0</i>
Total number of pages:	<i>9</i>

Abstract:
This document provides the list of third year publications, implemented as list of publications by the end of December 2015.

Disclaimer:

Document Control

Version	Details of Change	Review Owner	Approved	Date
1.0	Initial Version	Jari Nurmi		31.01.2016

Executive Summary

This document provides the list of third year publications, implemented as list of publications by the end of December 2015.

Authors

Partner	Name	Phone / Fax / e-mail
TUT	Jari Nurmi	Phone: +358 40 506 4460 e-mail: jari.nurmi@tut.fi
TUT	Pedro Figueiredo e Silva	email pedro.silva@gmail.com
TUT	Tommi Paakki	email tommi.paakki@tut.fi
TUT	Francescantonio Della Rosa	Phone: +358 50 3011959 e-mail: francescantonio.dellarosa@tut.fi

Table of Contents

Document Control 2

MULTI-POS Publications List as of December 2015 6

 Journal Articles 6

 Conference Papers, Book Chapters, etc..... 6

 PhD & Licentiate Theses..... 9

 Additional Publications and Presentations 9

MULTI-POS Publications List as of December 2015

Journal Articles

1. Anahid Basiri, Adam Winstanley, Pouria Amirian, "The Use of Quick Response (QR) codes in Landmark-Based Pedestrian Navigation", in *International Journal of Navigation and Observation*, vol. 2014, Hindawi, doi:10.1155/2014/897103, 2014.
2. Ossi A. Nykänen and Alejandro Rivero Rodriguez, "Problems in Context-Aware Semantic Computing," *Int. J. Interact. Mob. Technol.*, vol. 8, no. 3, pp. 32–39, Jun. 2014.

Conference Papers, Book Chapters, etc.

3. Leitinger, E., M. Froehle, P. Meissner, and K. Witrisal, "Multipath-Assisted Maximum-Likelihood Indoor Positioning using UWB Signals", in *Proc. IEEE ICC 2014 Workshop on Advances in Network Localization and Navigation (ANLN)*, Sydney, June 10-14, 2014.
4. Arash Shahmansoori, R. Montalbán, and G. Seco-Granados, "Optimal OFDM Pilot Sequences for Time-Delay and Channel Estimation Based on the Expected CRB for a Large Number of Subcarriers", in *Proc. IEEE international workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, June 23-25, 2014.
5. Jari Nurmi, Francescantonio Della Rosa, Elena-Simona Lohan, "MULTI-POS – Multi-technology Positioning Professionals Training Network," in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Helsinki, Finland, June 24-26, 2014.
6. Anahid Basiri, Pedro Figueiredo e Silva, Elena Simona Lohan, Pekka Peltola, Chris Hill, Terry Moore, "Overview of Positioning Technologies from Fitness-to-Purpose Point of View", in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Helsinki, Finland, June 24-26, 2014.
7. Enik Shytermeja, Axel Garcia-Pena, Olivier Julien, "Proposed Architecture for Integrity Monitoring of a GNSS/MEMS System with a Fisheye Camera in Urban Environment," in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Helsinki, Finland, June 24-26, 2014. Best Paper Award.
8. Arash Shahmansoori, R. Montalbán, J. A. Lopez-Salcedo, and G. Seco-Granados, "Design of OFDM Sequences for Joint Communications and Positioning Based on the Asymptotic Expected CRB", in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Helsinki, Finland, June 24-26, 2014.
9. Anahid Basiri and Pouria Amirian, Mike Jackson, "Automatic Point of Interests Detection Using Spatio-Temporal Data Mining Techniques over Anonymous Trajectories", Editors Murgante, B., Misra, S., Rocha, A.M.A.C., Torre, C., Rocha, J.G., Falcão, M.I., Taniar, D., Apduhan, B.O., Gervasi, O., *International Conference on Computational Science and Its Applications (ICCSA 2014)*, June 30 – July 3, 2014, Part IV, *Lecture Notes in Computer Science 8582*, ISBN 978-3-319-09152-5, pp. 185–198, 2014.
10. Anahid Basiri, Pouria Amirian, Adam Winstanley, "Use of Graph Databases in Tourist Navigation Application", Editors Murgante, B., Misra, S., Rocha, A.M.A.C., Torre, C., Rocha, J.G., Falcão, M.I., Taniar, D., Apduhan, B.O., Gervasi, O., *International Conference on Computational Science and Its Applications (ICCSA 2014)*, June 30 – July 3, 2014. Part V, *Lecture Notes in Computer Science 8583*, ISBN 978-3-319-09152-5, pp. 663-678, 2014.
11. Pouria Amirian, Anahid Basiri, and Adam Winstanley, "Evaluation of Data Management Systems for Geospatial Big Data", Editors Murgante, B., Misra, S., Rocha, A.M.A.C., Torre, C., Rocha, J.G., Falcão, M.I., Taniar, D., Apduhan, B.O., Gervasi, O., *International Conference on Computational Science and Its Applications (ICCSA 2014)*, June 30 – July 3, 2014. Part V, *Lecture Notes in Computer Science 8583*, ISBN 978-3-319-09152-5, pp. 185–198, 2014.
12. Arash Shahmansoori, R. Montalbán, and G. Seco-Granados, "Effect of Channel Variability on Pilot Design for Joint Communications and Positioning in OFDM", in *Proc. International*

-
- Symposium on Wireless Communication systems (ISWCS), Barcelona, Spain, Aug 26-29 2014.
13. P. Silva, O. Daniel, J. Nurmi, and E.-S. Lohan, "Cyclostationary features of downsampled 802.11g OFDM signal for cognitive positioning systems," in Proc. International Symposium on Wireless Communication systems (ISWCS), Barcelona, Spain, Aug 26-29 2014.
 14. F. Della Rosa, T. Paakki, G. Della Rosa, M. Pelosi, and J. Nurmi, "Hand-Grip Impact on Range-based Cooperative Positioning," in Proc. International Symposium on Wireless Communication systems (ISWCS), Barcelona, Spain, Aug 26-29 2014.
 15. Anahid Basiri, Adam Winstanley, Pouria Amirian, Terry Moore, Chris Hill, "Spatial Uncertainty Management in Pedestrian Navigation", in Principle and Application Progress in Location-Based Services; Lecture Notes in Geoinformation and Cartography, Editors Chun Liu, Springer, ISBN 978-3-319-04027-1, Doi: 10.1007/978-3-319-04028-8, 2014.
 16. M. Fröhle, A. A. Zaidi, E. Strom, and H. Wymeersch, "Multi-step sensor selection with position uncertainty constraints," in IEEE Globecom Workshops (GC Wkshps), 2014, pp. 1439–1444.
 17. M. Gan, P. Meissner, F. Mani, E. Leitinger, M. Frohle, C. Oestges, K. Witrisal, and T. Zemen, "Low-complexity sub-band divided ray tracing for UWB indoor channels," in IEEE Wireless Communications and Networking Conference (WCNC), 2014, pp. 305–310.
 18. M. Gan, P. Meissner, F. Mani, E. Leitinger, M. Frohle, C. Oestges, K. Witrisal, and T. Zemen, "Calibration of indoor UWB sub-band divided ray tracing using multiobjective simulated annealing," in IEEE International Conference on Communications (ICC), 2014, pp. 4844–4849.
 19. E. Leitinger, P. Meissner, M. Frohle, and K. Witrisal, "Performance bounds for multipath-assisted indoor localization on backscatter channels," in IEEE Radar Conference, 2014, pp. 0070–0075.
 20. M. L. Rahman, P. Figueiredo e Silva, and E.-S. Lohan, "Cyclostationarity-based spectrum sensing properties for signals of opportunity," in International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob?), 2014, pp. 390–395.
 21. Alejandro Rivero-Rodriguez, H. Leppäkoski, and R. Piche, "Semantic labeling of places based on phone usage features using supervised learning," in Ubiquitous Positioning Indoor Navigation and Location Based Service (UPINLBS), 2014, 2014, pp. 97–102.
 22. S. Sánchez-Naranjo, R. Ramos-Pollán, and F. A. González, "A Multicore Workflow for Inducing Data Driven GNSS Positioning Models," in CARLA HPC Latin American High Performance Computing Conference, 2014.
 23. Anahid Basiri, Mike Jackson, Pouria Amirian, Amir Pourabdollah, Monika Sester, Adam Winstanley, Lijuan Zhang, Terry Moore, "OpenStreetMap Data Validation Using Rules Derived from Tracking Data", in International Conference on Web-Age Information Management (WAIM), Macau, June 15-16, 2014. OpenStreetMap in GIScience: Experiences, Research, Applications, Lecture Notes in Computer Science LNCS 7418, Springer, ISSN: 1863-2246, Editors: J. Jokar Arsanjani, A. Zipf, P. Mooney, M. Helbich. 2015.
 24. Zhang, S., Fröhle, M., Wymeersch, H., Dammann, A. and Raulefs, R. (2015) Location-Aware Formation Control in Swarm Navigation, IEEE Globecom Workshops, 2015
 25. Anahid Basiri, P. Peltola, P. Figueiredo e Silva, E.S. Lohan, T. Moore, C. Hill, "Indoor Positioning Technology Assessment using Analytic Hierarchy Process for Pedestrian Navigation Services", in Proc. International Conference on Localization and GNSS (ICL-GNSS), Gothenburg, Sweden, June 2015.
 26. Amirian P, Basiri A, Van Loggerenberg F, Moore T, Lang T and Varga M (2015), "Intersection of Geospatial Big Data, Geocomputation and Cloud Computing", In EuroCarto2015.

-
27. Basiri A, Moore T, Hill C, Bhatia P and Anahid Basiri, Terry Moore, Chris Hill PB (2015), "Challenges of location-based services market analysis: current market description", In *Prog. Locat. Serv.* 2014. Cham, pp. 273-282. Springer International Publishing.
 28. Basiri, A.; Amirian, P.; Mooney, P. Using Crowdsourced Trajectories for Automated OSM Data Entry Approach. *Sensors* 2016, 16(9), 1510.
 29. Daniel O, Wymeersch H and Nurmi J (2015), "Hybrid Cooperative Positioning in Harsh Environments", In 2015 IEEE Globecom Work. (GC Workshops), pp. 1-6.
 30. E.S. Lohan, J. Talvitie, P. Figueiredo e Silva, H. Nurminen, S. Ali-Löytty, R. Piché, "Received Signal Strength models for WLAN and BLE-based indoor positioning in multi-floor buildings", in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Gothenburg, Sweden, June 2015.
 31. Fröhle M and Wymeersch H (2015), "On the Separation of Time Scales in Positioning", in *Proc. International Conference on Localization and GNSS (ICL-GNSS)*, Gothenburg, Sweden, June 2015.
 32. Liu H, Meng X, Chen Z, Stephenson S and Peltola P (2015), "A closed-loop EKF and multi-failure diagnosis approach for cooperative GNSS positioning", *GPS Solut.*, Sep, 2015.
 33. Meyer F, Wymeersch H, Frohle M and Hlawatsch F (2015), "Distributed Estimation with Information-Seeking Control in Agent Networks", *IEEE J. Sel. Areas Commun.* Vol. PP(99), pp. 1-1.
 34. Montasari R and Peltola P (2015), "Computer Forensic Analysis of Private Browsing Modes", In *Glob. Secur. Saf. Sustain. Tomorrow's Challenges Cyber Secur.* London Vol. 534 Springer International Publishing.
 35. Montasari R, Peltola P and Evans D (2015), "Integrated Computer Forensics Investigation Process Model (ICFIPM) for Computer Crime Investigations", In *Glob. Secur. Saf. Sustain. Tomorrow's Challenges Cyber Secur.* pp. 361. Springer.
 36. Nykänen O, Rivero-Rodriguez A, Pileggi P, Ranta PA, Kailanto M and Koro J (2015), "Associating Event Logs with Ontologies for Semantic Process Mining and Analysis", In *Proc. 19th International Academic Mindtrek Conference*. New York, NY, USA, pp. 138-143. ACM.
 37. P.M. Figueiredo e Silva and E.S. Lohan, "Room-level indoor positioning with Wi-Fi and RFID fingerprints", 23rd International Conference on Advances in Geographic Information Systems: ACM SIGSPATIAL, Nov 2015
 38. P.M. Figueiredo e Silva, A. Basiri, E.S. Lohan, J. Pinchin, C. Hill, T. Moore, "On the Impact of Intra-System Interference for Ranging and Positioning with Bluetooth Low Energy", 23rd International Conference on Advances in Geographic Information Systems: ACM SIGSPATIAL, Nov 2015
 39. P.M. Figueiredo e Silva, M.L. Rahman, G. Seco-Granados, and E.S. Lohan, "Detection of cyclic frequencies in a mixed CDMA and OFDM signal for cognitive positioning systems", in *Proc. of IEEE ICL GNSS*, Sweden, Jun 2015
 40. Pileggi P, Rivero-Rodriguez A and Nykänen O (2015), "Towards Traditional Simulation Models of Context Using Process Mining", In *Int. Conf. Comput. Intell. Commun. Networks*.
 41. Pileggi P, Rivero-Rodriguez A and Nykänen O (2015), "Using Context Overlays to Analyse the Role of a priori Information with Process Mining", In *Int. Syst. Conf.*, pp. 639-644. IEEE.
 42. Rivero-Rodriguez A, Pileggi P and Nykänen O (2015), "An Initial Homophily Indicator to Reinforce Context-Aware Semantic Computing", In *Int. Conf. Comput. Intell. Commun. Networks*. Riga
 43. Rivero-Rodriguez A, Pileggi P and Nykänen O (2015), "Social Approach for Context Analysis: Modelling and Predicting Social Network Evolution Using Homophily", In *Model. Using Context*. (9405), pp. 513-519. Springer International Publishing.

-
44. Arash Shahmansoori, G. Seco-Granados, H. Wymeersch, "Robust power allocation for OFDM wireless network localization", Proc. IEEE International Conference on Communications (ICC), Workshop on Advances in Network Localization and Navigation), Jun 08 2015
 45. Shytermeja E, Garcia-Pena A and Julien O (2015), "GNSS Signal Processing and Positioning Performance in Urban Environments", In Annu. Baska GNSS Conf. R. Inst. Navig..
 46. W. Wang, P.M. Figueiredo e Silva, and E.S. Lohan, "Investigations on mobility models and their impact on indoor positioning, 23rd International Conference on Advances in Geographic Information Systems: ACM SIGSPATIAL, Nov 2015
 47. O. Daniel and E. S. Lohan and J. Nurmi, "Relaxed direct position estimation as strategy for open-loop GNSS receivers", Proc. International Conference on Localization and GNSS (ICL-GNSS), Gothenburg, Sweden, June 2015.
 48. Arash Shahmansoori, G. E. Garcia, G. Destino, G. Seco-Granados, H. Wymeersch, "5G Position and Orientation Estimation through Millimeter Wave MIMO", Proc. IEEE Globecom (Workshop on Wireless Networking, Control and Positioning for Unmanned Autonomous Vehicles), Dec 2015.

PhD & Licentiate Theses

(currently none)

Additional Publications and Presentations

49. E. Leitinger, M. Froehle, P. Meissner, and K. Witrisal, "Multipath-Assisted Maximum-Likelihood Indoor Positioning using UWB Signals", COST Action IC1004 Management Committee Meeting, Ferrara, Italy, Feb 5, 2014.
50. J. Raasakka, M. Orejas, "Analysis of Notch Filtering Methods for Narrowband Interference Mitigation," abstract in IEEE/ION PLANS, Monterey, CA, USA, May 5-8, 2014.