europass Curriculum vitae

PERSONAL INFORMATION

Maciej Jerzy Paśnikowski

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Gender Male | Date of birth July 10, 1987

Nationality Polish

October 2017 – present — GNSS Specialist

Name and address of employer: Astri Polska Sp z o. o., Warsaw, Poland

Main activities and responsibilities: Navigation engineer in project funded by ESA dedicated to hybrid (GNSS & LTE) navigation – responsible for designing positioning algorithms, delegating work to other employees, preparing reports for the Technical Officer, supervising the project realization; support in the realization of the project of space-grade receivers testing for ESA including designing the systems; preparing ESA project proposals; working on business development in the area of GNSS and navigation.

October 2016 – September 2017 — Research Assistant

Name and address of employer: Department of Geodesy and Geodetic Astronomy, Faculty of Geodesy and Cartography, Warsaw University of Technology, Warsaw, Poland

Main activities and responsibilities: Research on navigation in harsh environments: coupling inertial navigation systems with precise geodetic measurement techniques to provide integrity in precise urban navigation. Teaching laboratory courses in the topics of geodesy and satellite navigation.

July 2013 – August 2016 — GNSS Navigation Engineer & Marie Curie ITN Early Stage Researcher

Name and address of employer: GMV Aerospace and Defence S.A.U., Madrid, Spain

Main activities and responsibilities: Research on navigation in harsh environments: characterization of the GNSS observables behavior in urban propagation conditions, performed under MULTI-POS (`http://multi-pos.eu/`) - the FP7 Marie Skłodowska-Curie ITN supported by the European Commission.

May 2016 – July 2016 — Invited Researcher

Name and address of employer: École Nationale de l'Aviation Civile, Toulouse, France

Main activities and responsibilities: Staying in ENAC in TELECOM Research Laboratory at SIGnal processing and NAVigation group focused on the research on carrier-phase based positioning technology and coupling with inertial sensors technique, performed as a secondment in MULTI-POS

March 2015 - August 2015 — Invited Researcher

Name and address of employer: Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain

Main activities and responsibilities: Research work with Signal Processing for Communications and Navigation (SPCOMNAV) group focused on multipath detection and integrity in navigation in constrained environments, resulting in several articles, performed as a secondment in MULTI-POS

September 2011 - June 2013 — Technical Support Engineer

Name and address of employer: TPI Sp z o. o., Warsaw, Poland

Main activities and responsibilities: Testing and implementing new surveying solutions; design, installation, implementation and maintenance of CORS network (over 120 stations) of TPI Sp. z o. o. (TPI NETpro)

April 2011 - August 2011 — General assistance for applications and services group

Name and address of employer: Astri Polska Sp z o. o., Warsaw, Poland

Main activities and responsibilities: Assistance in development of the Applications and Services division, looking for market opportunities

October 2010 - June 2011

Teaching assistant intern

Name and address of employer: Warsaw University of Technology, the Faculty of Geodesy and Cartography, Warsaw, Poland

Main activities and responsibilities: Teaching laboratory courses of geodesy and satellite geodesy in the Department of Geodesy and Geodetic Astronomy; assistance in the research projects conducted in the Department

August 2010

Internship

Name and address of employer: ASG-EUPOS Headquarters, Head Office of Geodesy and Cartography, Warsaw, Poland

Main activities and responsibilities: General help in the maintenance of the system, development of the tools available for the system user

EDUCATION

October 2016 – Present

Doctor of Philosophy studies in Geodesy

Name of the university: Warsaw University of Technology

Continuation of the PhD studies started in UAB, working title of the thesis: "Advanced assistance services of high performance in harsh environments"

May 2014 – September 2016

Doctor of Philosophy studies in Electronic and Telecommunication Engineering (not finished)

Name of the university: Universitat Autònoma de Barcelona, Bellaterra, Barcelona, Spain

Working title of the thesis: "Advanced assistance services of high performance in harsh environments"

February 2010 - December 2011

Master of Science in Engineering

Name of the university: Warsaw University of Technology, the Faculty of Geodesy and Cartography, Warszawa, Poland

Principal subjects: Geodesy and Cartography with the major in Geodesy and Satellite Navigation

MScE thesis title: "Influence of individual GPS antenna calibrations on station positions in a GPS regional network"

October 2006 - February 2010

Bachelor of Science in Engineering

Name and address of the university: Warsaw University of Technology, the Faculty of Geodesy and Cartography, Warszawa, Poland

Principal subjects: Geodesy and Cartography

TRAINING

October 2016

Training 'Integrity Monitoring for Safety-Critical Applications'

Name of the university: École Nationale de l'Aviation Civile, Toulouse, France

July 2016

ESA/JRC international summer school on Global Navigation Satellite System (GNSS)

Name of the university: European Space Agency & Joint Research Centre, Ispra, Italy

PERSONAL SKILLS

Mother tongue: Polish

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
Spanish	B2	B2	B2	B2	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference (CEF) level

IT skills and competences

- good command of Matlab — code development for LTE receiver in TEcHNO (GNSS & LTE navigation) project, use for research purposes in EC IGNSSRX project and for other research purposes, especially for the analysis of GNSS observables, RTK and PPP navigation results, cycle slip detection
- fair knowledge of Python – writing navigation algorithms for TEcHNO (GNSS & LTE navigation) project
- general knowlegde of C/C++ – utilized for integrating navigation engine written in C with C++ RTKLIB functions for hybrid navigation algorithms during MULTI-POS project
- general knowledge of Perl, Bash and VBA scripting gained during master thesis, PhD research and courses taught
- tendency to create most of the documents in LaTeX

Organisational skills

- Prioritizing, attention to details, analytical skills, ability to determine the problem - gained during my research work in MULTI-POS project and PhD studies
- Communication skills, team skills, problem solving, ambition to motivate myself and team members, tracking tasks and multitasking – skills gained through work in MULTI-POS project and for Students' Union at the university
- Organizing work of the team members - gained in Students' Union and coordinating work of CORS installation team at TPI Sp. z o. o.

Social skills and competences

- Team spirit evolved during work in Students' Union
- good ability to adapt to multicultural environments, interacting with people at different levels gained though my work experience in MULTI-POS project

Other relevant skills and competences

- Reading volumes of material, writing scientific papers, writing reports, applying professional knowledge, gathering information — gained at research work in MULTI-POS project and PhD research

ADDITIONAL INFORMATION

Recent publications

S. M. Sánchez-Naranjo, N. G. Ferrara, M. J. Paśnikowski, J. Raasakka, E. Shytermeja, R. Ramos-Pollán, F. A. González Osorio, D. Martínez, E.S. Lohan, J. Nurmi, M. Toledo López, O. Kotaba, O. Julien *Chapter 4. GNSS Vulnerabilities* Multi-Technology Positioning, Eds. J. Nurmi, E.S. Lohan, H. Wymeersch, G. Seco-Granados, O. Nykänen, Springer International Publishing, 2017, pp 55-77

E. Shytermeja, M. J. Paśnikowski, O. Julien, M. Toledo López *Chapter 5. GNSS Quality of Service in Urban Environment* Multi-Technology Positioning, Eds. J. Nurmi, E.S. Lohan, H. Wymeersch, G. Seco-Granados, O. Nykänen, Springer International Publishing, 2017, pp 79-105

M. J. Paśnikowski, E. Domínguez, GMV, Spain; E. Aguado, D. Lowe, M. Pattinson, M. Hutchinson, NSL, United Kingdom; G. Seco-Granados, J. López-Salcedo, D. Egea-Roca, UAB, Spain; D. Naberezhnykh, TRL, United Kingdom; F. Dovis, Politecnico di Torino, Italy; J.P. Boyero, I. Fernandez, European Commission, Belgium *Challenges for Integrity in Navigation of High Precision*, Proceedings of the 28th International Technical Meeting of The Satellite Division of the Institute of Navigation (ION GNSS+ 2015)

D. Egea-Roca, G. Seco-Granados, J. López-Salcedo, UAB, Spain; C. Moriana, M. J. Paśnikowski, E. Domínguez, GMV, Spain; E. Aguado, D. Lowe, NSL, United Kingdom; D. Naberezhnykh, TRL, United Kingdom; J.P. Boyero, I. Fernandez, European Commission, Belgium; F. Dovis, Politecnico di Torino, Italy *Signal-level Integrity and Metrics Based on the Application of Quickest Detection Theory to Multipath Detection*, Proceedings of the 28th International Technical Meeting of The Satellite Division of the Institute of Navigation (ION GNSS+ 2015)

N. G. Ferrara, M. J. Paśnikowski, S. M. Sanchez Naranjo, F. A. González Osorio, R. Ramos-Pollán, G. Seco-Granados, D. Egea-Roca, M. Solé, M. Toledo, E.S. Lohan *Combined Architecture For Muli-Dimensional Signal Quality Enhancements In GNSS Receivers*, Fifth International Colloquium on Scientific and Fundamental Aspects of the Galileo Programme, October 28th 2015, Braunschweig