

CURRICULUM VITAE

PERSONAL INFORMATION

Name KACPER, PLUTA
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Nationality Polish



PROFESSION

▷ Period 2017
○ Employer **University Paris-Est Marne-la-Vallée**
○ Position Attaché Temporaire d'Enseignement et de Recherche
○ Main Responsibilities Research and teaching
○ Contract Type Full time, Determinate duration

▷ Period 2012–2013
○ Employer **Technical University of Łódź**
○ Position Oracle (PL/SQL) and Delphi developer
○ Main Responsibilities Development and maintenance of internal systems
○ Contract Type Full time, Determinate duration

▷ Period 2010–2012
○ Employer **Sanitary-Epidemiological Office in Ostrów Wielkopolski**
○ Position IT administrator
○ Main Responsibilities Maintenance of the internal IT infrastructure
○ Contract Type Full time, Indeterminate duration

EDUCATION

▷ Period 2014–2017
○ Acquired Qualifications **Ph.D.** in Computer Science
○ Institution University Paris-Est
○ Thesis Subject Rigid Motions on Discrete Spaces
○ Supervisors Yukiko KENMOCHI and Pascal ROMON

▷ Period 2013–2014
○ Acquired Qualifications **Master** in Computer Science
○ Institution University Paris-Est Marne-la-Vallée
○ Program Labex Bézout – International track in Computer Science and Maths
○ Track Signal, Image, Synthèse
○ Comments Obtained with honors (avec mention très bien)

▷ Period 2009–2013
○ Acquired Qualifications **Bachelor** in Computer Science
○ Institution University of Computer Sciences and Skills in Łódź
○ Track Programming and Databases
○ Comments Several scholarships of Polish ministry of higher education for the best students

PUBLICATIONS

- ▷ Journal Domej G., Bouedeau C., Lenti L., Pluta K.: Mean Landslide Geometries Inferred From a Global Database of Earthquake- and Non-earthquake-Triggered Landslides. *Italian Journal of Engineering Geology and Environment*, 2017, vol. 2, pp. 87–108, doi:10.4408/IJEGE.2017-02.O-05
- ▷ Journal Pluta K., T. Roussillon, D. Cœurjolly, P. Romon, Y. Kenmochi, V. Ostromoukhov: Characterization of bijective digitized rotations on the hexagonal grid. To Appear in *Journal of Mathematical Imaging and Vision*, doi:10.1007/s10851-018-0785-1
- ▷ Journal Pluta K., Romon P., Kenmochi Y., Passat N.: Bijective Digitized Rigid Motions on Subsets of the Plane. *Journal of Mathematical Imaging and Vision*, 2017, vol. 59(1), pp. 84–105, doi:10.1007/s10851-017-0706-8
- ▷ Journal Pluta K., Janaszewski M., Postolski M.: New Algorithm for Modeling of Bronchial Trees. *Image Processing & Communications*, 2012, vol. 17(4), pp. 179-190, doi:10.2478/v10248-012-0045-8
- ▷ Conference Proceedings Pluta K., Romon P., Kenmochi Y., Passat N.: Honeycomb Geometry: Rigid Motions on the Hexagonal Grid. *Lecture Notes in Computer Science*. DGCI, 2017, vol. 10502, pp. 33–45, doi:10.1007/978-3-319-66272-5_4
- ▷ Conference Proceedings Pluta K., Moroz G., Kenmochi Y., Romon P.: Quadric Arrangement in Classifying Rigid Motions of a 3D Digital Image. *Lecture Notes in Computer Science*. CASC, 2016, vol. 9890, pp. 426–443, doi:10.1007/978-3-319-45641-6_27
- ▷ Conference Proceedings Pluta K., Romon P., Kenmochi Y., Passat N.: Bijectivity Certification of 3D Digitized Rotations. *Lecture Notes in Computer Science*. CTIC, 2016, vol. 9667, pp. 30–41, doi:10.1007/978-3-319-39441-1_4
- ▷ Conference Proceedings Pluta K., Romon P., Kenmochi Y., Passat N.: Bijective Rigid Motions of the 2D Cartesian Grid. *Lecture Notes in Computer Science*. DGCI, 2016, vol. 9647, pp. 359–371, doi:10.1007/978-3-319-32360-2_28
- ▷ Conference Proceedings Pluta K., Postolski M., Janaszewski M.: Bronchial Tree Modeling Algorithms. *Science Bulletin of the College of Computer Science in Łódź*, SMiSKT, 2012, vol. 11(1), pp. 152–170
- ▷ Technical Report Pluta K., Kenmochi Y., Passat N., Talbot H., Romon P.: Topological Alterations of 3D Digital Images under Rigid Transformations. HAL, 2016, hal:hal-01333586
- ▷ Abstract with Poster Domej G., Bourdeau C., Lenti L., Pluta K.: A Global Database of Seismically and Non-seismically Triggered Landslides for 2D/3D Numerical Modeling, Poster session presented at European Geosciences Union, 2017
- ▷ Bachelor Thesis Pluta K.: Algorytmy Modelowania Geometrii Drzew Oskrzelowych w Przestrzeni 3D. University of Computer Science in Łódź, 2013
- ▷ Technical Magazine Pluta K.: Static Content Management Systems. *Polish Edition of Linux+ Magazine*, 2010
- ▷ Technical Magazine Pluta K.: Preview of eyeOS. *Polish Edition of Linux+ Magazine*, 2010

- ▷ Technical Magazine

Pluta K.: Survey of antivirus software for Linux Desktops. *Polish Edition of Linux+ Magazine*, 2010

TALKS

- ▷ International Conference

Honeycomb Geometry: Rigid Motions on the Hexagonal Grid, DGCI, Vienna, 2017

- ▷ International Conference

Quadrics Arrangement in Classifying Rigid Motions of a 3D Digital Image, CASC, Bucharest, 2016

- ▷ International Conference

Bijection Certification of 3D Digitized Rotations, CTIC, Marseilles, 2016

- ▷ International Conference

Bijection Rigid Motions of the 2D Cartesian Grid, DGCI, Nantes, 2016

- ▷ Seminary

Quadrics Arrangement in Classifying Rigid Motions of a 3D Digital Image, INRIA, Nancy, 2016

- ▷ National Working Group Day

Bijection Certification of 3D Digitized Rotations, Journée du GéoDis, Marseilles, 2016

- ▷ National Working Group Day (Poster)

Bijection Rigid Motions of the 2D Cartesian Grid, Journée du GDR-IM, Villeteuse, 2016

- ▷ National Working Group Day

Bijection Rigid Motions of the 2D Cartesian Grid, Journée du GéoDis, Lyon, 2015

- ▷ National Project Workshop

Local Characterization of Rigid Motions in 2D Cartesian Grid, KIDICO, Obernai, 2015

- ▷ National Working Group Day

Topological Alterations of 3D Digital Images under Rigid Transformations, Journée du GéoDis, Reims, 2014

- ▷ National Conference (Poster)

New Algorithm for Modeling of Bronchial Trees, SŁOK, Słok, 2012

- ▷ National Conference

Bronchial Tree Modeling Algorithms, SMiSKT, Łódź, 2012

- ▷ Doctoral School Students' Workshop

Bijection Certification of 3D Digitized Rotations, Noisy-le-Grand, 2016

- ▷ Doctoral school Students' Workshop

Honeycomb Geometry: Rigid Motions on the Hexagonal Grid, Noisy-le-Grand, 2017

TEACHING

- ▷ Labs (Bachelor 1)

Algorithmic and Programming 1, University Paris-Est Marne-la-Vallée, 36h, 2017/18, **head**: Antoine Meyer

- ▷ Labs (Master 2)

Digital Geometry, University Paris-Est Marne-la-Vallée, 5h, 2017/18, **with**: Yukiko Kenmochi

- ▷ Labs (Master 1)

Linux API, University Paris-Est Marne-la-Vallée, 24h, 2017/18, **head**: Sylvain CHerrier

- ▷ Labs (Master 1)

Object-Oriented Programming 1, University Paris-Est Marne-la-Vallée, 48h, 2017/18, **head**: Sylvain CHerrier

- ▷ Labs (Master 1) Workshop on C Programming, University Paris-Est Marne-la-Vallée, 4h, 2017/18
- ▷ Lectures & Labs (Master 1) Introduction to Computational Geometry, ESIEE Paris, 16h, 2016/17, **head:** Nabil Mustafa
- ▷ Labs (Master 2) Digital Geometry, University Paris-Est Marne-la-Vallée, 5h, 2016/17, **with:** Yukiko Kenmochi
- ▷ Lectures & Labs (Master 1) Object-Oriented Programming 1, University Paris-Est Marne-la-Vallée, 48h, 2016/17, **head:** Sylvain Cherrier
- ▷ Project (Master 1) Image Analysis and Synthesis, ESIEE Paris, Leading a group of 3 students for 8 weeks, 2015/16, **head:** Jean Cousty
- ▷ Labs (Master 1) Introduction to Computational Geometry, ESIEE Paris, 8h, 2015/16, **head:** Nabil Mustafa
- ▷ Lectures & Labs (Master 1) Graphical Interface Programming, ESIEE Paris, 16h, 2015/16, **head:** Nabil Mustafa
- ▷ Labs (Bachelor 3) Algorithms and Programming, University Paris-Est Marne-la-Vallée, 24h, 2014/15 Fall, **head:** Éric Laporte

AWARDS

- ▷ 2016 Software Award of Symposium on Geometric Processing for DGtal. Laureates (collective price, by alphabetical order) : P.H. Cerdan, D. Cœurjolly, R. Denis, P. Gueth, B. Kerautret, J.-O. Lachaud, J. Levallois, K. Pluta, I. Sivignon, T. Roussillon
- ▷ 2010 The first award in a competition which consisted of proposing a use of Hewlett-Packard virtualization technologies

LANGUAGES

MOTHER TONGUE
OTHER LANGUAGES

Polish
English – professional (scientific)
French – sufficient (professional context)

ABILITIES

PROGRAMMING
LANGUAGES

C/C++, Maple, Wolfram Language, Delphi, Oracle (PL/SQL), Microsoft SQL (T-SQL and SQLJet), DB2 SQL, Python, CUDA, Java, Fortran 95, Shell scripts, XPath, VBA

PROGRAMMING LIBRARIES

Qt, SDL, ITK, VTK, libDGtal, libPink

CASE AND OTHER TOOLS

git, svn, Valgrind, GNU Debugger, Amira

OTHER KNOWN
TECHNOLOGIES

XML, LaTeX, HTML, TikZ, Asymptote

HOBBIES

developing DGtal, reading popular science magazines and books, biking, listening to music, cooking