Curriculum Vitae

Personal Information

Name	Kacper, PLUTA
E-Mail	kacper.pluta@gmail.com
Web Page	copyme.github.io
Nationality	Polish

Profession

▷ Period	2018–present
○ Employer	**Technion – Israel Institute of Technology**
○ Position	Postdoctoral fellow
○ Main Responsibilities	Research
○ Contract Type	Full time, Determinate duration
▷ Period	2017–2018
○ 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

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 (Polish engineer's degree)** in Computer Science
○ Institution	University of Computer Sciences and Skills in Łódź
○ Track	Programming and Databases
○ Comments	Several scholarships of the Polish ministry of higher education for the best students

PUBLICATIONS

▷ Journal	Domej G., Bouedeau C., Lenti L., Salvatore M., Pluta K.: Shape and Dimension Estimations of Landslide Rupture Zones via Correlations of Characteristic Parameters. *Geosciences*, 2020, vol. 10(5), pp. 198–221, doi:10.4408/10.3390/geosciences10050198
▷ 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	Passat N., Kenmochi Y., Ngo P., Pluta K.: Rigid Motions in the Cubic grid: a Discussion on Topological Issues. *Lecture Notes in Computer Science*. DGCI, 2019, vol. 11414, pp. 127–140, doi:10.1007/978-3-030-14085-4_11
▷ 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	Bijectivity Certification of 3D Digitized Rotations, CTIC, Marseilles, 2016
▷ International Conference	Bijective 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	Bijectivity Certification of 3D Digitized Rotations, Journée du GéoDis, Marseilles, 2016
▷ National Working Group Day (Poster)	Bijective Rigid Motions of the 2D Cartesian Grid, Journée du GDR-IM, Villetaneuse, 2016
▷ National Working Group Day	Bijective 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	Bijectivity 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	**Polish**
OTHER LANGUAGES	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, CUDA
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