

# CURRICULUM VITAE

## PERSONAL INFORMATION

Name  
E-Mail  
Web Page  
Nationality

KACPER, PLUTA  
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perso.esiee.fr/~plutak  
Polish



## PROFESSION

- ▷ Period
- Employer
- Position
- Main Responsibilities
- Contract Type

2017

**University Paris-Est Marne-la-Vallée**  
Attaché Temporaire d'Enseignement et de Recherche  
Research and teaching  
Full time, Determinate duration

- ▷ Period
- Employer
- Position
- Main Responsibilities
- Contract Type

2012–2013

**Technical University of Łódź**  
Oracle (PL/SQL) and Delphi developer  
Development and maintenance of internal systems  
Full time, Determinate duration

- ▷ Period
- Employer
- Position
- Main Responsibilities
- Contract Type

2010–2012

**Sanitary-Epidemiological Office in Ostrów Wielkopolski**  
IT administrator  
Maintenance of the internal IT infrastructure  
Full time, Indeterminate duration

## EDUCATION

- ▷ Period
- Acquired Qualifications
- Institution
- Thesis Subject
- Supervisors

2014–2017

**PhD** in Computer Science  
University Paris-Est  
Rigid Transformations in 2D and 3D Cartesian Grids  
Yukiko KENMOCHI and Pascal ROMON

- ▷ Period
- Acquired Qualifications
- Institution
- Program
- Track
- Comments

2013–2014

**Master** in Computer Science  
University Paris-Est Marne-la-Vallée  
Labex Bézout – International track in Computer Science and Maths  
Signal, Image, Synthèse  
Obtained with honors (avec mention très bien)

- ▷ Period
- Acquired Qualifications
- Institution
- Track
- Comments

2009–2013

**Bachelor** in Computer Science  
University of Computer Sciences and Skills in Łódź  
Programming and Databases  
Several scholarships of Polish ministry of higher education for the best students

## PUBLICATIONS

- ▷ 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, 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, 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
- ▷ Working paper      Pluta K., T. Roussillon, D. Cœurjolly, P. Romon, Y. Kenmochi, V. Ostromoukhov: Characterization of bijective digitized rotations on the hexagonal grid. Submitted to *Journal of Mathematical Imaging and Vision*, hal:hal-01540772
- ▷ Working paper      Domej G., Bouedeau C., Lenti L., Pluta K.: A Global Database of Seismically and Non-seismically Triggered Landslides for 2D/3D Numerical Modeling. Submitted to *Italian Journal of Engineering Geology and Environment*
- ▷ 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

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

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

- ▷ National Conference

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

## AWARDS

▷ 2016	SGP Software award for DGtal
▷ 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 – basic

## 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 libDGtal, reading popular science magazines and books, biking, listening to music, cooking