Ludovic Magerand

Seeking a position as a lecturer or assistant professor in computer science/vision

Education

December 2014 — **PhD in computer vision**, *Univ. Blaise Pascal (Inst. Pascal)*, Clermont-Ferrand.
Thesis title : "Dynamic pose estimation with CMOS camera using sequential acquisition". The goal of this work is to estimate an object pose and motion from a single rolling shutter image.

June 2008 — **Master's degree**, *Université Blaise Pascal*, Clermont-Ferrand.
Specialization in computer vision for robotics.

2006–2007 — **Engineer student**, *Université de Sherbrooke*, Sherbrooke.
Specialization in computer sciences, this year was conducted as part of the student exchange program between France and the Quebec province.

2003–2007 — **Engineer student**, *École des Mines d'Alès*, Alès et Nîmes.
École des Mines d'Alès is a french engineering school, the first three years are dedicated to general education and the last year to specialization at master level. Graduated in computer science major.

2002–2003 — **Preparatory class**, *Lycée Lafayette*, Clermont-Ferrand.
Prepare students to engineering school by studying mathematics, physics and chemistry.

June 2002 — **High school diploma (obtained with honors)**, *Lycée Lafayette*, Clermont-Ferrand.

Work experiences

October 2017–... — **Young Researcher**, *CVUT/CTU (CIIRC)*, Prague.
Research in camera autocalibration with minimal polynomial methods for rigid and non-rigid case. Also working on a hierarchical projective Structure-from-Motion framework.

March 2017–Aug. 2017 — **Teaching fellow**, *ESIGELEC*, Rouen.
Teaching computer science to undergraduate and postgraduate students using pro-active pedagogy methods. Subjects : GUI in Java, database/JDBC and project management (Scrum).

March 2015–Feb. 2017 — **Postdoctoral Researcher**, *Istituto Italiano di Tecnologia (dep. PAVIS)*, Genova.
Research project on the perspective Structure-from-Motion problem with a factorization based approach in the projective space allowing parallel computing.

Oct. 2011–Sept. 2013 — **Assistant Professor**, *Université d'Auvergne*, Le Puy-en-Velay.
Courses : "Algorithmic and PHP" (course, lab sessions and tutorials), "Web application security" (course, lab sessions and tutorials), "Databases and information system" (lab sessions and tutorials), "Network and system administration" (lab sessions), "Web tools : HTML and CSS" (lab sessions) and "Object-oriented programming" (lab sessions).

Oct. 2008–Sept. 2011 — **Teaching Assistant**, *Université Blaise Pascal*, Clermont-Ferrand.
Courses : "Algorithmic and C" (lab sessions and tutorials), "Graph theory" (lab sessions), "Web tools : HTML, CSS and JavaScript" (lab sessions) and "Artificial intelligence" (lab sessions).

Feb.–June 2008 — **Research Internship**, *Institut Pascal*, Clermont-Ferrand.
Working on approximating the perspective camera projection by a piecewise affine camera model.

Jan.–May 2007 — **Final Project Study**, *Université de Sherbrooke*, Sherbrooke.
Working on a new cryptographic method designed specifically for images.

June–August 2006 — **Assistant Engineer Internship**, *SmartIO Systems*, Nîmes.
Integration of «GNU/Linux» inside a mobile device communication aid for the dumb.

September 2004 — **Tutor**, *École des Mines d'Alès*, Alès.
In charge of a remedial course in computer science for new students.

Professional skills

Programming	C/C++, Ruby, Java, Python, MATLAB, OpenMP, CMake, Mercurial, Git, Docker
Op. Sys.	«GNU/Linux» (since 1998), Windows (since 1995), Android (since 2012)
Network	Ethernet, WLAN, PowerDNS, OpenVPN, OSPF, Snort/Nagios/Icinga
Web	PHP, html 5, CSS 3, Javascript, Ajax, JQuery, MySQL, Symfony, Lighttpd, Postfix
French	Mother tongue
English	Fluent *TOEIC at 885 in November 2005*

References

Tomas Pajdla, *Professor at CVUT / CTU Prague*, pajdla@cvut.cz.
Tomas is my current supervisor at CIIRC.

Alessio Del Bue, *Researcher at IIT*, alessio.delbue@iit.it.
Alessio was my supervisor in my post-doctoral position.

Alexandre Guitton, *Assistant professor at UCA*, alexandre.guitton@uca.fr.
I did lab sessions and tutorials for a course that Alexandre was in charge.

Adrien Bartoli, *Professor at UCA*, adrien.bartoli@gmail.com.
Adrien was my doctoral adviser.

Miscellaneous

2006– . . .	Administration of my own domain name and dedicated server
2006– . . .	Volunteer rescuer and first aid trainer at the french red-cross
2003–2007	Network/system admin. and resp. of the climbing club, at École des Mines d'Alès
January 2006	Driving license

Publications, *available at https://magerand.fr*

Ludovic Magerand and Alessio Del Bue. Revisiting projective structure from motion : A robust and efficient incremental solution. *IEEE transactions on pattern analysis and machine intelligence*, 2018.

Ludovic Magerand and Alessio Del Bue. Practical Projective Structure from Motion (P2SfM). In *ICCV*, 2017.

Ludovic Magerand. Calcul de pose dynamique avec les caméras cmos utilisant une acquisition séquentielle. In *PhD Thesis*, December 2014.

Ludovic Magerand, Adrien Bartoli, Omar Ait-Aider, and Daniel Pizarro. Global Optimization of Object Pose and Motion from a Single Rolling Shutter Image with Automatic 2D-3D Matching. In *ECCV*, 2012.

Ludovic Magerand and Adrien Bartoli. A Generic Rolling Shutter Camera Model and its Application to Dynamic Pose Estimation. In *3DPVT*, 2010.

Ludovic Magerand, Adrien Bartoli, and Omar Ait-Aider. Un modèle de projection «rolling shutter» flexible appliqué au calcul de pose. In *Orasis*, 2009.

Ludovic Magerand, Adrien Bartoli, Michel Grédiac, and Jean-Marc Thiesse. Détermination de la matrice de rigidité d'un matériau en petites déformations planes à partir du flot optique. In *Coresa*, 2009.