Fabrice Michel

31 years old
Address : 75020 Paris, France
Nationality : French

Research/Software Engineer

Work Experience

September 2012 — **DASSAULT SYSTÈMES - CORPORATE RESEARCH DEPARTMENT.**
Research scientist.
Computer Vision & Machine Learning
Research Topics : Machine Learning for detection and recognition, Gait Analysis, Activity Recognition, Data Fusion for 3D Reconstruction, Compressed Sensing, Dictionary Learning for Image InPainting, Large Scale Visual Search.
Supervised 4 6-Months internships, and co-supervising one 3-years apprenticeship.

April 2008 - March 2012 (4 Years) — **ECOLE CENTRALE PARIS/INRIA SACLAY.**
Research scientist under the supervision of Nikos Paragios.
Multi-Modal Similarity Learning for 3D Deformable Registration of Medical Images
Key Achievement : Authored and co-authored 4 papers in the most distinguished conferences in the field, 1 Computer Vision (CVPR10), 3 Medical Imaging (ISBI10, MICCAI10, ISBI11)

May 2010 - July 2010 (2.5 Months) — **TECHNICAL UNIVERSITY OF MUNICH (TUM).**
Invited Research Scientist.
Supervisor : Nassir Navab

August 2006 - August 2007 (13 Months) — **SIEMENS CORPORATE RESEARCH, PRINCETON N.J., USA.**
Research/Software Engineer Intern with Ali Kamen.
Research and Development in the context of high-end medical imaging industry
Key Achievement : Research work lead to a patent application

April-July 2005 (3 Months) — **INRA MONTPELLIER/INRIA.**
Research intern in Applied Mathematics.

Education

2008-2012 — **ECOLE CENTRALE PARIS (ECP) - INRIA SACLAY.**
PhD, Computer Vision and Machine Learning. Supervisor : Nikos Paragios.
Jury : Nassir Navab (Chair), Xavier Pennec (Reviewer), Nicolas Vayatis (Reviewer), Julia Schnabel (Examiner), Michael Bronstein (Examiner), Ali Kamen (Examiner)
Multi-Modal Similarity Learning for 3D Deformable Registration of Medical Images
Graduated with the highest honors (Mention Très Honorable)

2007-2008 — **ECOLE NORMALE SUPÉRIEURE (ENS) DE CACHAN.**
Master's degree 'Mathématique Vision Apprentissage'.
One of France's leading research schools
Statistics, Probabilities, Computer Vision
Graduated with distinctions ('Très Bien')

2004-2008 — **ECOLE NATIONALE DES PONTS ET CHAUSSÉES (ENPC).**
French Engineer's Degree (Equivalent to a Master of Science).
One of France's leading engineering schools
Major : Mathematics and Computer Science
Specialization : Computer vision, image processing

Languages

French	Native
English	Fluent/Bilingual written and spoken
Spanish, German	Beginner

Computer Skills

Programming	**C/C++ Object oriented programming**, OpenCV, PCL, Qt, MS Kinect SDK
Scripting Language	**Matlab**, Scilab

Patents

2014 **BODY POSTURE TRACKING.**
Malika Boulkenafed, Fabrice Michel
US20140358475 A1, Application in December 2014

2008 **SYSTEM AND METHOD FOR GEODESIC IMAGE MATCHING USING EDGE POINTS INTERPOLATION.**
Ali Khamene, Fabrice Michel
US 8218909, issued in July 2012

Publications

Boosted Learning for 3D Multi-modal Deformable Registration.
IEEE International Symposium on Biomedical Imaging (ISBI'11)
F. Michel, M. Bronstein, A. Bronstein & N. Paragios

3D Knowledge-based Segmentation using Pose-Invariant Higher-Order Graphs.
International Conference, Medical Image Computing and Computer Assisted Intervention (MICCAI'10)
C. Wang, O. Teboul, F. Michel, S. Essafi & N. Paragios

Data Fusion through Cross-modality Metric Learning using Similarity-Sensitive Hashing.
IEEE International Conference on Computer Vision and Pattern Recognition (CVPR'10)
M. Bronstein, A. Bronstein, F. Michel & N. Paragios

Image Transport Regression Using Mixture of Experts and Discrete Markov Random Fields.
IEEE International Symposium on Biomedical Imaging (ISBI'10)
F. Michel & N. Paragios

Accademic Activity

2012-2014 **Reviewer for IEEE-TIP, CVIU, MICCAI, IEEE-CVPR, IEEE-BMVC.**

Teaching

2014-2015 **ECOLE CENTRALE PARIS.**
Student Seminar.
Tutoring a 6 months last year student project

2011 **ECOLE CENTRALE PARIS.**
Algorithmics in Maltab.
Lecturer to graduate students

2010 and 2009 **ECOLE CENTRALE PARIS.**
Computer Vision Introduction (2010) and Signal Processing Introduction (2009 and 2010).
Teaching Assistant to 4^{th} year students
Lecturer : Iasonas Kokkinos (2010) and Nikos Paragios (2009)

Awards

2005 **Design Award - 'Prix Spécial du Jury'.**
Design Week 2005 Ponts et Chaussées

Extracurricular Activities

Photography (portrait photography and food photography), fine cuisine, both having and making

References

Prof N. Paragios	nikos.paragios@ecp.fr	+33 (0) 1-4113-1785
Prof M. Bronstein	michael.bronstein@usi.ch	+41 58 6664120
Prof N. Navab	navab@cs.tum.edu	+49 (89) 289-17057