11, rue des Couronnes 75020 Paris France ☎ 00-336-38-04-46-19 ⊠ baptiste.mazin@gmail.com ☜ mazin.wp.mines-telecom.fr/ 좋 https://github.com/Etsitpab/JSM

# Baptiste Mazin

Image Processing & Computer Vision

# Experience

### Industry

Nov.2014–Now Image Processing R&D Engineer, GoPro , Image Science Group, Paris.

- In the Image Science R&D team, I am currently working on the development of image processing algorithms. More specifically, I'm working on :
  - image fusion (HDR and temporal);
  - image denoising;
  - image stabilization.

The team is developping under Agile software development method.

### Academic

Apr.2014–Nov.2014 **Postdoc Researcher**, *Univeristat Pompeu Fabra*, Barcelona, Image Processing Group. Depth Maps Estimation from a single image, segmentation methods.

Sept.2010–Mar.2014 Ph.D. in Image Processing, Télécom ParisTech, LTCI, Paris.

Robust Methods for Illuminant Estimation and Color Images Matching. *Ph.D. conducted under the direction of Yann Gousseau and Julie Delon* This thesis focused on three topics :

- Colorimetric invariance via illuminant estimation and color constancy;
- Local image matching using local descriptors (SIFT, SURF, LPB, etc.)
- Color image statistics.

### Teaching

2010-2013 Teaching assistant, Paris VI University, Paris, 64 hours per year.

I gave many tutorials :

- most of them about C Language;
- some about algorithmic;
- some about Java, HTML, assembly language;
- I also supervised student projects.

## Personal project : The JavaScript Matrix Library

2012-2015 **Developer**, https://github.com/Etsitpab/JSM/.

I developed this library from scratch with online reproducible research in mind. It provides tools similar to those proposed in Matlab. JSM library aims to dealing with data, with efficiently implemented algorithms for image processing and computer vision.

# Education

- Sept.2008–Sept.2009 Automatic control, signal and image processing, *Supélec / Paris-Sud University*, Paris, *Engineering Degree*.
- Sept.2007–Sept.2008 Electronic and Telecommunications, Paris-Est University, Paris, Master 1.
- Sept.2005–Sept.2007 Electronic Electrotechnical and Automatic Control, Paris-Est University, Paris, Licence degree.

# Internships

August 2011	Santaló's Summer School on Mathematical Models in Image Processing and
	Computer Vision, UIMP Santander, Spain.
	<ul> <li>Julie Delon, Optimal transportation;</li> </ul>
	<ul> <li>Yoav Freund, Quantifying and Utilizing prediction confidence;</li> </ul>
	<ul> <li>Vladimir Kolmogorov, The MAP-MRF approach in computer vision;</li> </ul>
	<ul> <li>Lionel Moisan, Image Processing using Fourier Representation;</li> </ul>
	<ul> <li>Justin Romberg, Sparsity in Image Processing and Compressive Sampling.</li> </ul>
April–August 2010	The relevance of color for local image matching, Télécom ParisTech.
	Development of local image matching alorithms.
Mai–July 2009	Implementation of parallel iterative algorithms, Université de Paris-Est.
	Implementation of algorithms for image denoising using variational approaches.
	Computer Science skills and languages
Languages spoken	French : Native speaker English : C1 Experienced user German : A2 Elementary user

Version control Mercurial, GIT, SVN Languages Matlab, C, C++, Python, Java, JavaScript, HTML Office Latex, Microsoft Office

## Main publications

Baptiste Mazin, Julie Delon and Yann Gousseau, Yann, Estimation of Illuminants from Projections on the Planckian Locus, Transactions on image processing, 2015

Edoardo Provenzi, Julie Delon, Yann Gousseau and Baptiste Mazin, On the second order spatiochromatic structure of natural images, Vision Research, 2015

Baptiste Mazin, Julie Delon and Yann Gousseau, Yann, Combining color and geometry for local image matching, ICPR, 2012

Baptiste Mazin, Julie Delon and Yann Gousseau, Yann, Illuminant Estimation from Projections on the Planckian Locus, ECCV Workshops, 2012

## Interests

Reading group I'm actively participating in a reading group presenting articles related to image processing. Cinema I occasionally participate to the production of non-professional short movies. Music I play piano inside a Jazz band. Associative life I was involved in the organization of a music festival called Rock'Ambolesk (Chevry-Cossigny). I was in charge of music programming and sound engineer.

# References

Prof. Yann Gousseau Ph.D. advisor yann.gousseau@telecom-paristech.fr Prof. Julie Delon Ph.D. co-advisor julie.delon@parisdescartes.fr Dr. Edoardo Provenzi edoardo.provenzi@parisdescartes.fr