

Henryk Krzysztof Blasinski

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ELECTRONICS AND COMPUTER ENGINEERING EDUCATION

Stanford University **Stanford, CA**
Ph.D., Electrical Engineering **2011 - present**

- GPA 4.0
- Coursework: Digital Image Processing, Computer Vision, Machine Learning, Probabilistic Graphical Models, Data Mining
- Teaching assistant: Applied Vision and Image Systems, Signals and Systems, Linear Dynamical Systems

Institut Supérieur d'Electronique de Paris **Paris, France**
Master of Science in Electronics **2009**

- GPA 17.8/20.0
- Final project: 'FPGAs for wide-angle and fish-eye webcams'

Technical University of Lodz **Lodz, Poland**
Master of Science and Engineering in Telecommunications and Computer Science **2008**

- Graduated with highest honors, GPA 4.91/5.0
- Dissertation: 'Development, Implementation and Evaluation of Power Consumption Reduction of an Iris Segmentation Algorithm on FPGAs'
- Exchange student at Osaka University Short-term Student Exchange Program, 2006-2007

RESEARCH EXPERIENCE

University of Rochester, Department of Electrical and Computer Engineering **Rochester, NY**
Research Assistant **2010 - 2011**

- Fulbright Fellow.
- Developed in Java a methodology of extending 2D barcodes into color increasing their capacity by a factor of three (patent pending).
- Created ZXing based barcode decoding application for Android.

Osaka University, Miyazaki Laboratory **Osaka, Japan**
Research Student **2006 - 2007**

- Worked with a team of fellow students on the development of a robot controlled laparoscope system.
- In MATLAB, implemented Weiner filter to laparoscope position prediction mechanism.
- Evaluated system performance during mock surgeries.

INDUSTRY EXPERIENCE

Apple Inc. **Cupertino, CA**
Video Engineering Intern **June - September 2013**

- Investigated next generation image processing pipelines for digital cameras.
- Developed new tone mapping and color correction algorithms for future versions of iPhone imaging pipeline.

Canon USA **San Jose, CA**
Senior Engineering Intern **June - August 2012**

- Member of the Computational Photography research group at Canon Innovation Center.
- Designed, simulated and created a proof of concept multispectral display and a camera.
- Submitted three invention disclosures.

Logitech Inc. **Fremont, CA**
Advanced Technologies Unit Intern **2008 - 2009**

- Implemented real-time barrel distortion correction system in a Spartan 3 FPGA.
- Evaluated light field photography techniques, such as microlens arrays and dappled photography.

SELECTED PUBLICATIONS

Blasinski, H.; Bulan O.; Sharma G.; 'Per-Colorant-Channel Color Barcodes for Mobile Applications: An Interference Cancellation Framework,' *IEEE Transactions on Image Processing*, April 2013

Blasinski, H.; Hai W.; Lohier F.; 'Real-time, color image barrel distortion removal,' in *proc. IEEE International Symposium on Circuits and Systems ISCAS*, Seoul, Korea, 20-23 May 2012

Bulan O.; **Blasinski H.;** Sharma G.; 'Color QR Codes: Increased Capacity via Per-Channel Data Encoding and Interference Cancellation,' in *proc. Nineteenth Color and Imaging conference CIC*, San Jose, USA, 7-11 November 2011

Blasinski, H.; Hai W.; Lohier F.; 'FPGA Architecture for real-time barrel distortion correction of colour images,' in *proc. IEEE International Conference on Multimedia and Expo ICME*, Barcelona, Spain, 11-15 July 2011

Blasinski, H.; Amiel, F.; Ea, T.; 'Impact of different power reduction techniques at architectural level on modern FPGAs,' in *proc. IEEE Latin American Symposium on Circuits and Systems LASCAS*, Iguacu Falls, Brazil, 24-26 February 2010

Blasinski, H.; Nishikawa, A.; Miyazaki, F.; 'The application of adaptive filters for motion prediction in visually tracked laparoscopic surgery,' in *proc. IEEE International Conference on Robotics and Biomimetics ROBIO*, 15-18 December 2007

AWARDS

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| • Fellowship of the Lodz Regional Government | 2011 |
| • Fulbright Graduate Student Award winner. | 2009 |
| • Ronald and Evelyn Crawford Award for the best Master of Science thesis written in English. | 2009 |
| • DP-Systems award for the best Master of Science Thesis. | 2009 |
| • Transition Technologies 'Hi-Tech' award for the best Master of Science project. | 2008 |
| • Polish Talents award for outstanding scientific achievements. | 2007 |
| • Ministry of Science and Higher Education Fellowship for remarkable scientific achievements. | 2007, 2006, 2005 |
| • Scholarship of the Technical University of Lodz for scientific achievements. | 2004 |

TECHNICAL SKILLS

Languages	Java, C/C++, VHDL, HTML, CSS, LaTeX
Software	Matlab, Visual Studio, Eclipse, Quartus II, NIOS IDE, Xilinx ISE, Adobe Photoshop, Adobe Illustrator

LANGUAGES

English	Bilingual, Cambridge University Certificate of Proficiency in English grade B, TOEIC 990, TOEFL 118, GRE (V/Q/A: 510/790/4.5)
French	Advanced, Test d'Evaluation du Francais TEF 789 points
Polish	Mother tongue
Japanese	Beginner

HOBBIES AND INTERESTS

Sailing	<ul style="list-style-type: none"> • Founded International Faculty of Engineering Sailing Club, organized the first Polish team to participate in CCEDHEC international student regatta. Managed a group of 15 people and a budget of approximately \$20,000 2010 • Professional maritime communications (GOC) and radar (ARPA) certificates 2010 • Polish Yachting Association Junior Sailing Instructor 2009 • Polish Yachting Association Yacht Skipper 2007
Other	Skiing, rock-climbing, photography, bridge