Yannick Hold-Geoffroy | Ph.D.

Education

Ph.D. in Electrical Engineering (Dean's Honor Roll) — **Québec**
Université Laval — *2014–2018*
Title: Learning Geometric and Lighting priors from Natural Images.
Advisor: Jean-François Lalonde

Masters in Electrical Engineering — **Québec**
Université Laval — *2012–2014*
Title: SCOOP: cadriciel de calcul distribué générique
Advisor: Marc Parizeau

Bachelor in Computer Engineering — **Québec**
Université Laval — *2008–2012*

Scholarships and awards

2018: CIPPRS Doctoral Dissertation Award
2016-2018: Adobe Research funding
2015 & 2017: Otis-Lalonde Scholarship — *3000$ CAD*
2015: Excellence Scholarship, Université Laval — *1000$ CAD*
2015: Best Paper Award (Runner Up), 3DV — *500€*
2014: FRQ-NT : Ph.D. Scholarship — *63000$ CAD*

Publications

- *Y. Hold-Geoffroy*, A. Athwale, J.-F. Lalonde, *Deep Sky Modeling for Single Image Outdoor Lighting Estimation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019
  Oral Presentation
- *Y. Hold-Geoffroy*, K. Sunkavalli, J. Eisenmann, M. Fisher, E. Gambaretto, S. Hadap, J.-F. Lalonde, *A Perceptual Measure for Deep Single Image Camera Calibration*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- *Y. Hold-Geoffroy*, K. Sunkavalli, S. Hadap, E. Gambaretto, J.-F. Lalonde, *Deep Outdoor Illumination Estimation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017
  Oral Presentation
- *Y. Hold-Geoffroy*, J. Zhang, P. FU Gotardo, J.-F. Lalonde, *x-hour Outdoor Photometric Stereo*, International Conference on 3D Vision (3DV), 2015
  Best Paper Award (Runner Up)
- *Y. Hold-Geoffroy*, J. Zhang, P. FU Gotardo, J.-F. Lalonde, *What Is a Good Day for Outdoor Photometric Stereo?*, IEEE International Conference on Computational Photography (ICCP), 2015
- *Y. Hold-Geoffroy*, O. Gagnon, M. Parizeau, *Once you SCOOP, no need to fork*, Proceedings of the 2014 Annual Conference on Extreme Science and Engineering Discovery Environment, 2014

Patents

- Y. Hold-Geoffroy, S. Hadap, K. Sunkavalli, E. Gambaretto, *Extrapolating lighting conditions from a single digital image* U.S. Patent 20180359416A1, Issued December 2018.
- Y. Hold-Geoffroy, J. Eisenmann, M. Fisher, S. Hadap, K. Sunkavalli, *Neural network based camera calibration*, filed November 2017.

Presentations

- *Deep Sky Modeling for Single Image Outdoor Lighting Estimation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Los Angeles, 2019
- *Artificial Intelligence for 2D and 3D Compositing*, Arizona State University, 2018
- *Deep Outdoor Illumination Estimation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Honolulu, 2017
- x*-hour Outdoor Photometric Stereo*, International Conference on 3D Vision (3DV), Lyon, 2015
- *What Is a Good Day for Outdoor Photometric Stereo?*, IEEE International Conference on Computational Photography (ICCP), Houston, 2015
- *Once you SCOOP, no need to fork*, Proceedings of the 2014 Annual Conference on Extreme Science and Engineering Discovery Environment (XSEDE), Atlanta, 2014

Work experience

Adobe **San José**
Research Engineer *2018-present*
Performing research on Machine Learning based approaches to solve computer vision problems.

Adobe Systems **San José**
Research intern *2016, 2017*
(2016) Single image outdoor illumination estimation using deep learning
State-of-the-art results for recovering HDR outdoor illumination from a single LDR image. Work presented at CVPR 2017 and tech transferred to Adobe Dimension.
(2017) Convolutional Neural Network (CNN) based camera calibration
Recover camera calibration from a single image. Work presented at CVPR 2018 and tech transferred to Adobe Dimension.

Community Involvement and Skills

Reviewer: CVPR 2015-present (outstanding reviewer award 2019), ICCV 2015,2017-present, CGF 2018, MVA 2019, 3DV 2018, SIGGRAPH 2018, CRV 2018-2019, IET-CVI 2017, Eurographics 2018

Expertise: Computer Vision, Lighting modeling, Photometric Stereo, Deep Machine Learning

Languages: **French**: Native speaker **English**: Excellent **Italian**: Conversational