

Chloe A. LeGendre

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- EDUCATION**
- University of Southern California**, Los Angeles, CA **August 2015 -**
Ph.D., Computer Science (in progress)
- Stevens Institute of Technology**, Hoboken, NJ **September 2012 - May 2015**
M.S., Computer Science
GPA: 4.00
- University of Pennsylvania**, Philadelphia, PA **September 2005 - May 2009**
B.S. in Engineering, Chemical and Biomolecular Engineering
GPA: 3.69
- RESEARCH INTERESTS** Computational Photography, Appearance Capture, Color Imaging & Measurement, Computer Vision, 3D Reconstruction
- RESEARCH EXPERIENCE**
- Graduate Research Assistant** **August 2015 - present**
Vision and Graphics Lab, USC Institute for Creative Technologies, Playa Vista, CA
- Advisor: Professor Paul Debevec
 - Multispectral imaging, lighting reproduction, computational photography, appearance capture, spectroscopy.
- Graduate Research Assistant** **January 2014 - July 2015**
Department of Computer Science, Stevens Institute of Technology, Hoboken, NJ
- Advisor: Associate Professor Philippos Mordohai
 - 3D reconstruction, binocular and multiview stereo vision from video and high resolution images.
- PUBLICATIONS**
- LeGendre, C.**, Yu, X., Liu, D., Busch, J., Jones, A., Pattanaik, S., and Debevec, P. 2016. Practical Multispectral Lighting Reproduction. *ACM Transactions on Graphics (TOG)*, 35, 4 (July): 32 (SIGGRAPH 2016).
- LeGendre C.**, Yu, X., and Debevec, P. 2016. Efficient Multispectral Reflectance Function Capture for Image-Based Relighting. In *Proc. of IS&T Color Imaging Conference 24*, 2016.
- LeGendre C.**, Yu, X., and Debevec, P. 2016. Optimal LED Selection for Multispectral Lighting Reproduction. In *ACM SIGGRAPH 2016 Posters*, ACM, SIGGRAPH 2016.
- LeGendre C.**, Yu, X., and Debevec, P. 2017. Optimal LED Selection for Multispectral Lighting Reproduction. In *Proc. of IS&T Electronic Imaging 2017 Material Appearance Conference*. [*Best Student Paper Award*]
- Holm, J., Maier, T., Debevec, P., **LeGendre, C.**, Pines, J., Erland, J., Joblove, G., Dyer, S., Sloan, B., di Gennaro, J., and Sherlock, D. 2016. A Cinematic Spectral Similarity Index. In *Proc. of Annual Technical Conference & Exhibition, Society of Motion Picture and Television Engineers (SMPTE) 2016*.

PROFESSIONAL EXPERIENCE	<p>L'Oréal USA Research & Innovation, Clark, NJ Senior Scientist I/II, Emerging Technologies May 2013 - June 2015</p> <ul style="list-style-type: none"> • <i>Makeup Genius</i> augmented reality smartphone application that uses facial feature tracking to virtually apply cosmetic products in real time (9M downloads globally). • <i>Skintone Pro</i> low-cost spectrophotometer device with embedded learning algorithms for cosmetic product recommendations. <p>Scientist, Instrumentation and Imaging Laboratory September 2011 - April 2013</p> <ul style="list-style-type: none"> • Clinical instrumentation and multimodal image capture and analysis methods to assess changes in skin conditions over time. <p>Johnson & Johnson Consumer Products Company, Skillman, NJ Scientist I/II, R&D Leadership Program June 2009 - August 2011</p> <ul style="list-style-type: none"> • Clinical instrumentation and imaging methods for skin health assessment. • FIRST Robotics strategy mentor to FIRST team 75 (Hillsborough, NJ). <p>University of Pennsylvania, Philadelphia, PA Department of Chemical and Biomolecular Engineering T.A., Fundamentals of Biotechnology September 2006 - December 2006</p>
PATENT APPLICATIONS	<p>G. Balooch, R. Jung, W. Jung, C. LeGendre, A. Loudermilk, P. Patel, W. Sloan. Systems and methods for measuring spectra of skin and other objects and materials and making predictions based thereon. Application No. US 20150085279 A1. Filed 18 September 2014.</p> <p>G. Balooch, C. LeGendre, A. Loudermilk, C. Luongo, P. Patel, W. Sloan. Systems and methods for measuring and categorizing colors and spectra of surfaces. Application No. WO 2015040110 A1. Filed 18 September 2014.</p>
SERVICE	<p>Academy of Motion Picture Arts and Sciences - Science & Technology Council Committee on Solid State Lighting (member).</p>
HONORS AND AWARDS	<p>Annenberg Ph.D. Fellowship, University of Southern California (2015 - 2019). Computing Research Association CRA-W Grad Cohort - Travel Stipend (2017). Best Student Paper, IS&T Electronic Imaging Conference (2017). Dean's List, University of Pennsylvania (2007 - 2009). Stuart W. Churchill Individual Research Prize for Undergraduate Research in Chemical Engineering, University of Pennsylvania (2009).</p>
PROGRAMMING	<p>C++, OpenCV, CUDA, MATLAB, Python.</p>
SOFTWARE	<p>NUKE, Maya (Arnold, V-Ray), Adobe Photoshop.</p>
LANGUAGE	<p>English (native), French (proficient).</p>
MEMBERSHIP	<p>ACM (2013 - present).</p>