

INDUSTRY EXPERIENCE

- 9/2012 – 3/2016 **Optical Engineer: Microsoft Corporation**, Redmond, WA
Display Subsystem: HoloLens V1 Launch Team (7/2013 – 3/2016)
- Contributed to Pass/Fail criteria for individual and full stack SRGs
 - Created and carried out human perception tests for chromaticity requirements using binocular color summation to determine color specifications and standards for AR systems
 - Aided in defining software for Imaging Colorimeters on the assembly line
 - Designed 2m lens for mixed reality object focus for AR system
 - Supported cross team design consideration: Ergonomics, Human Factors, Platform, Experiences
- Xbox Kinect: Xbox One Launch Team (9/2012 – 7/2013)
- Supported development of ambient light independent facial recognition using IR illumination
 - Contributed to defining RGB sensor LUTs for broad consumer use
 - Interfaced with RGB/IR sensor suppliers and coordinated parts testing for next generation console accessories
- 1/2008 – 5/2012 **Undergraduate Research Assistant: Polarization Lab, College of Optical Sciences**, Tucson, AZ
Research Director: Russell Chipman
- Performed measurement, analysis, and maintenance on the Mueller Matrix Imaging Polarimeter (MMIP)
 - Maintained LabView data acquisition, calibration, and detailed analysis software for MMIP
 - Supported test analysis of the Multi-Angle Spectral Polarimetric Imager (MISPI), partnered with NASA/JPL
- 5/2011 – 8/2011 **Optical Engineer Intern: Microsoft Corporation**, Redmond, WA
Xbox Kinect
- Tested LensVector LC lens for viability as an optical solution for rapid focus and DOF shift and reduced illumination FOV for next generation Kinect products

WORK EXPERIENCE

- 3/2016 – Present **Musical Theater/Dance Performing Artist**, New York, NY
- NYC based performer seen in various international, regional, and local NY dance and theater productions
 - The Great American Dance Tour, Art.If.Act Dance Project (China)
 - SAKS Fifth Avenue Window Reveal (New York, NY)
 - Marvelous Mrs. Maisel: Season 1 (Amazon Prime)
 - Alice in Wonderland (Seattle, WA)
- 10/2018 – Present **Associate Producer/Copyright and Archive Management: Christie's**, New York, NY
- Content marketing research, production video creation, various office tasks, preparation for auctions
- 2/2017 – Present **Academic Tutor/STEM Educator**, New York, NY
- High school and college math and physics tutor, AP test prep, test skills and time management
 - CUNY's Baruch STEP Summer Academy: Everyday Optics for middle school

EDUCATION

The University of Arizona College of Optical Sciences, Tucson, AZ

Master's Distance Learning Courses: E&M (M. Mansuripur, Fall 2013), Diffraction & Interferometry (T. Milster, Spring 2014)

B.S. Optical Sciences and Engineering, Mathematics Minor May 2012, Cum Laude, GPA 3.86/4.0

The University of Arizona College of Fine Arts, Tucson, AZ

B.F.A. Dance, December 2011, Cum Laude, GPA 3.688/4.0

TECHNICAL SKILLS

- **Optical Specialties:** Geometrical and physical optics, polarization propagation, diffractive optics, color science and colorimetry, color image processing, hologram technology, computational optics, optical design algorithms and optimization, image acquisition, optical system design, wavefront coding, image and display quality (MTF, illumination, luminance and chromaticity uniformity)
- **Engineering:** Patent drafting and filing, ISO and ANSI standards compliance and testing, technical writing, algorithm development for multi-dimensional data arrays, system architecture, data management, data visualization
- **Computation & Lab Software:** MATLAB (Standard and Image Processing Toolboxes), Zemax, LabView (National Instruments), Imatest | Limited Experience: Mathematica (Wolfram Alpha), Unity | Basic familiarity: Python, C++, C#
- **Laboratory experience:** Color science and colorimetry experimentation, human visual systems, geometrical optical alignment, design, assembly line testing, polarization measurement systems, design of experiments, image quality testing (Tri-Optics MTF, Konica Minolta, Radiant Imaging)

PATENTS / PUBLICATIONS

Microsoft Technology Licensing LLC with Levola, Tapani; Saarikko, Pasi; Robbins, Steven J.; Poon, Yarn Chee; **Wolfe, Lena A.**; Towle, Erica L. 2018. Wearable Image Display System, US Patent 20180267318, filed Feb. 9, 2015, and issued Sept. 20, 2018.

J. I. Brent, M. Barnum, S. Corrales, N. Ding, K. Green, and **L. Wolfe**, "Experimental Comparison of Computational Approaches to Focus Invariant Optical Systems," in *Imaging and Applied Optics Technical Papers*, OSA Technical Digest 2012, CM2B.5.