

Eliana Stilson

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Education

Anticipated 2025 University of Arizona Tucson, Arizona

Bachelor of Optical Sciences and Engineering

- 3.85 cumulative GPA
- Passionate about exploring the intersection of physics and engineering to create innovative optical solutions.
- Completed classes include Calculus 1,2, & 3, Solid State Chemistry, Geometrical & Instrumental Optics I & 2, Basic Circuits, and Physics Optics 1.
- Current classes include Radiometry, Sources and detectors, Semiconductor Physics & Lasers, and Mathematical Analysis for Engineers.

Professional Experience

Undergraduate Research Assistant in BOOM Laboratory

08/2022 – current University of Arizona Tucson, Arizona

- Under Dr. Travis Sawyer in the Biomedical Optics & Optical Measurement Lab.
- Conducting research on the adverse effects of Formaldehyde fixation on endogenous fluorophores autofluorescence intensities.
- Responsible for investigation of the decay rate in endogenous fluorophores autofluorescence over time due to Formaldehyde fixation.
- Ability to operate Multispectral Imaging System and experienced using Image J software.

Undergraduate Research Assistant in the Institute für Technische Optik

06/2023 – 08/2023 University of Stuttgart Stuttgart, Germany

- Designed a magnetically actuated objective doublet lens using software methods of Zemax and SolidWorks.
- Responsible for designing and simulating the lens system by optimizing the lens geometry, minimizing aberrations, and maximizing the system's efficiency.

Outreach Chair – Student Optics Chapter Club

01/2023 – current The Wyant College of Optical Sciences Tucson, Arizona

- Excite people about optics, educate the younger generation, and encourage students to join the Wyant College of Optical Sciences.
- Arrange and organize outreach events; create high school/ middle school presentations, live demos, and Laser Fun Day.

Knowledge and Skills

- *Technical Computing:* 3D printing, MATLAB, Solid Works, and Image J.
- *Optical Laboratory Skills:* Cleaning of optical elements, proper handling of equipment, laser safety, data reduction analysis, and measurement scales.
- *Experience with Office Software:* MS Excel, Word, Powerpoint, etc.
- *Communication and Team Building:* Trained and educated by graduate students in Biomedical Optics and Optical Measurement Laboratory.

Honors and Awards

- Eustace L. Derek Family and Friends Endowed Scholarship in Optical Sciences – May 2023.
- Dean's List with Distinction – May 2023.
- Wildcat Recognition Award – September 2020.