### **Torrey King**

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#### SKILLS

MATLAB, Solidworks, Zemax Optic Studio, Excel, Microsoft Office Suite, HTML, CSS, data collection/analysis/reporting, ASME standards, complex problem solving, conflict resolution, cultural competence, and professional conduct

#### EDUCATION

Northern Arizona University B.S. Mechanical Engineering, Minor in Mathematics

Aug 2020 - May 2024

### **EXPERIENCE**

#### Spectral Forest Mechanical Engineer, NAU Capstone

- Conceptualized and iteratively developed an optical spectrometer
- Achieved excellence in project management and client communication
- Executed optic design using Zemax and incorporating manual focal and ray calculations
- Optimized for weight and size constraints while maintaining a FOV of 45°
- Created a user-friendly web interface for the project after independently learning HTML, CSS, and web design skills
- Performed comprehensive heat analysis of the print material to maintain rigidity and ability to dissipate internal electrical heat production using MATLAB to ensure the spectrometer's functionality under varying environmental conditions

#### Resident Assistant, NAU

- Initiated and led community engagement activities, fostering inclusivity and collaboration among residents whilst providing resources and education
- Demonstrated crisis management leadership during 12-hour on-call shifts, employing effective intervention techniques and following protocols for responses
- Provided adept communication, guidance, and conflict resolution for academic and personal matters

#### Ultimate Frisbee Captain, NAU Club Sports

- Planned and led team practices with focus on skill development
- Fundraised and budgeted club funds for team tournaments and travel
- Organized two local tournaments requiring permits, food, and trainers
- Worked within a team of co-captains to achieve desired player development

#### Study Abroad in Prague

- Engaged in cross-cultural academic exchange with local professors and peers
- Successfully balanced mathematical and historical studies with immersive cultural experiences

#### August 2021 - May 2023

## August 2022 - May 2023

June 2023 - August 2023

# August 2023 - Present