

# Bradley Peterson

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## Education

**B.S. Computer Science - 2024**  
Arizona State University, Tempe, AZ

## Skills

**Programming**  
Proficient in Python, JavaScript, Java, and C++. Developed various applications ranging from utility scripts to interactive games and applications.

**Prompt Engineering**  
Expertise in leveraging advanced AI models like GPT-4 to enhance user experiences and drive innovation.

**Communication**  
Acted as a liaison between technical and non-technical departments, translating intricate concepts into actionable solutions. Regularly present on dark-sky advocacy to diverse audiences.

**Web Development**  
Experience in developing dynamic web interfaces and applications, integrated with backend services.

**Leadership & Teamwork**  
Led several group projects at Arizona State emphasizing both technical direction and team inclusivity.

## Other Interests

- Astrophotography
- Cycling/E-Bikes
- Gardening

Senior in Computer Science at Arizona State with a rich portfolio in programming and data analysis. Proven leader in collaborative projects, with skill at communicating complex data concepts. Eager to further explore AI's potential to solve problems and create meaningful change.

## Projects

### AI Travel Assistant Webapp

- Developed a conversational interface for end-to-end travel planning and booking, powered by GPT-4 and multiple travel APIs.
- Collaborated with business graduates, blending technical and business insights to create a market-ready product.

### Light Pollution Data Analysis Project (Ongoing)

- Fused astrophotography and comprehensive data analysis of 3,700+ sky-brightness samples to understand light patterns across central AZ using Python and ML techniques such as DBSCAN clustering and nuanced neural-net classification with Keras.
- Presented actionable findings to city councils, directly influencing city lighting objectives.

### p5.js Projects: Games, Simulators

- Directed an Engineering group project creating a set of games, earning an A+ grade due to features which stood out from the rest.
- Demonstrated expertise in object-oriented programming and data structures through the creation of an arcade-style shooter and a quadtree-optimized physics simulator.

## Work Experience

### OFW - Data Team: 2023 June - *currently employed*

- Act as a key connection between the Data-Processing team and both Management and our Database Partner.
- Express the needs and friction points of the Data Team, offering actionable suggestions to improve efficiency.

### Capstone: Mayo Clinic - Review Enhancement - *In Progress*

- Developing an AI model using Llama-2 7B to detect and mitigate toxic sentiments in scientific manuscript reviews.
- Employing reinforcement learning with human feedback to refine and improve friendly feedback generation.

## Courses (complete)

- Data Structures & Algorithms
- Intro to Artificial Intelligence
- Principles of Programming

## In Progress

- Database Management
- Found. of Machine Learning
- CS Capstone Project