# **Bradley Peterson**



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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 Al's potential to solve problems and create meaningful change.

# Education

#### **B.S. Computer Science**

2024 - Arizona State, Tempe, AZ

# **Skills**

### Programming

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

#### Prompt Engineering

Expertise in leveraging advanced Al 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. Regular presenter 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
   F-Bike Enthusiast
- Gardening with native species

# Projects

### Al Travel Assistant Webapp

 Developed a conversational interface for end-to-end travel planning, powered by GPT-4 and multiple travel APIs.
 Integrated travel APIs to facilitate searches and bookings of flights, accommodations, and activities.

## Light Pollution Data Analysis Project (Ongoing)

- Fused astrophotography and comprehensive data analysis of 2,700+ sky-brightness samples to understand light patterns across central AZ using Python and ML techniques such as clustering and nuanced neural-net classification with Keras.
- Presented actionable findings to city councils, directly impacting city lighting objectives.

### p5.js Project: Games, Simulators

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

# Mayo Clinic - Review Enhancement System (In Progress) • Developing an Al 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.

# Work Experience

#### 2023 June - currently employed

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

### Courses

# In Progress:

- Data Structures & Algorithms
   Intro to Artificial Intelligence
   Foundations of Machine Learning
- · Principles of Programming Lang · CS Capstone Project