# Immersive Video Game for Astronomy Education ID# 2017-4646



### **TECHNOLOGY READINESS** 8-10

Seeking

LEVEL

Investment | Licensing | Research

#### Keywords

- astronomy
- astronomy education
- astronomy learning
- astronomy video game

#### Researchers

Jane Charlton, Ph.D. Lead Researcher

Nahks Tr'Ehnl **Research Partner** 

**Timothy Schneider Research Partner** 

#### **Office of Technology Management Contact**

Swope, Bradley bas101@psu.edu 814-863-5987



Mars Colony

### **Technology Summary**

This video game written in Unity 3D teaches the basic concepts of astronomy through an interactive storyline and series of immersive activities framed within stories. It is appropriate for middle school, high school, and non-science collegiate undergraduate students. The 15-to-30hour game allows students to learn astronomy virtually and brings entertainment to the subject matter, making the learning process more effective and enjoyable.

## **Application & Market Utility**

Students are often intimidated by science, or find reading about the topic dry and boring. Capitalizing on the widespread popularity of video games, our technology makes astronomy more relevant and accessible. By actively participating in quests, students gain a better understanding and appreciation of the cosmos. The experience can be used for courses in schools and home schooling, as well as recreation both for children and adults.

### **Next Steps**

Seeking research collaboration and licensing opportunities.



Invent Penn State is a Commonwealth-wide initiative to spur economic development, job creation, and student career success. Invent Penn State blends entrepreneurship-focused academic programs, business startup training and incubation, funding for commercialization, and university-community collaborations to facilitate the challenging process of turning research discoveries into valuable products and services that can benefit Pennsylvanians and humankind. Learn more at invent.psu.edu.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.