

# STEM Webinar Sessions

## July Sessions

July 17th, 2020

2020  
BOBCAT SUMMER STEM  
ACADEMY  
VIRTUAL EDITION



***Presenter: Jimmy Gonzalez Nunez***

### **Introduction to Modeling Biological Systems**

Have you ever thought about all that goes into learning how to code? Thinking about how and where to start can be so frightening, so debilitating that it deters us from learning how to communicate with computers in order to solve complex problems. In this session, we adventure through fundamental principles in programming by exploring modeling approaches used in biological systems, such as the spread of an infectious disease in a community. We shall start from general observations and construct simple models that can be implemented in Python and Jupyter notebooks. From here, we use this virtual playground to examine what information about the biological system can be drawn from these models.

### **About the Presenter:**

Jimmy is a 2nd year Physics graduate student at UC Merced, and is currently studying population genetics in bacterial colonies using computational physics methodologies. While his focus is on researching fundamental principles in physical systems, he enjoys taking time to explore his passion of contributing to the education of young minds and inspiring tomorrow's researchers.

### **Who is the webinar session open to?**

**Grades 9th-12th (High School), Teacher, Community members, Undergrads**

### **When is the session:**

- **July 17th: 10am to 11am**

### **How can you register?**

### **Zoom Registration Link Below:**

**<https://ucmerced.zoom.us/meeting/register/tJMpfuyhrDlpGtzV94iNiYVQNht0hzHd3WxW>**