

Design with Python: Intermediate Virtual Camp

Tuesday, August 5 to Friday, August 8 (4-days)
10:00 AM to 12:00 PM

Daily Schedule

10:00 AM	Virtual Room Opens
10:00 AM - 10:05 AM	Attendance
10:05 AM - 10:55 AM	Lesson and Activity Time
10:55 AM - 11:00 AM	Break
11:00 AM - 11:55 AM	Lesson and Activity Time
11:55 AM - 12:00 PM	Wrap Up

Daily Summary

Day 1 | Spilling the Tea on Programming Relationships

Tuesday, August 5 | 10:00 AM to 12:00 PM

Campers will explore Object-Oriented Programming (OOP) concepts and inheritance. They will develop a game, game characters, and a map to discuss how inheritance works in coding. This exciting hands-on experience will help them understand the relationships between different parts of a program.

Day 2 | It's a Piece of Cake to Bake a Pretty Cake

Wednesday, August 6 | 10:00 AM to 12:00 PM

On the second day, campers will dive into algorithms and AI. They will develop an AI for a boss character based on the previous day's work, exploring how AI can influence the way we design game mechanics and character behavior.

Day 3 | Bro I'm LAGGING

Thursday, August 7 | 10:00 AM to 12:00 PM

This day is all about cybersecurity vulnerabilities and concerns. Campers will learn about cyberattacks, how to prevent them, and dive into image recognition techniques. They'll also be introduced to ORB (Oriented FAST and Rotated BRIEF) and develop a fingerprint scanner in Python, putting their newfound cybersecurity knowledge to the test!

Day 4 | With Great AI Comes Great Cyber Responsibility

Friday, August 8 | 10:00 AM to 12:00 PM

Campers will explore general AI, Machine Learning, Recommender Systems, and the basics of DeepFakes. They'll learn about the role of AI in cybersecurity and how to spot fake news with AI-powered systems. As a final project, campers will develop an AI fake news detector to sharpen their understanding of both AI and the ethical responsibilities it brings.