

# Microsoft Open Hack - AI

## Overview

## Computer Vision OpenHack

Hello and welcome to Microsoft OpenHack, a challenge oriented hack event. This experience will be presented as a series of challenges, each one adding a new level of depth and complexity to a machine learning solution for computer vision.

Teams should already be assigned and seated together. During your days of hacking, teams will attempt to solve as many challenges as possible.

Team coaches are the first point of contact, and are available for technical support during the hack, but they will not solve challenges or provide answers for teams.

## Scenario



*Adventure Works*

Adventure Works, a major outdoor and climbing gear retailer, wants to understand customer behavior by learning more about the gear that consumers wear; and plans to accomplish this with powerful Microsoft and open-source technologies for computer vision.

Your team has been invited to work with Adventure Works and build a series of computer vision solutions based on the image data they have collected.

## Challenges

Each challenge covers a different aspect of machine learning for computer vision, and all of them will require you to write Python code. You can reference the Python 3.6 documentation at <https://docs.python.org/3.6/>.

Challenges do not include step-by-step instructions. Your team must work together to determine a solution for each challenge using the hints and documentation references provided, with guidance from your coach when needed. There may be multiple ways to complete each challenge correctly. Your coach will validate your solution for each challenge before enabling access to the next one.

## One Final Tip

**Read everything carefully!**

- The OpenHack team has worked hard to ensure that each problem is solvable and that all required details are included in the challenge briefs
- Briefs are very carefully written and worded to give clues toward the solution
- Reading challenges thoughtfully is the best way to figure out successful approaches, as nuances can be easily missed
- Coaches will not give out the answers, but rather will be a resource to fill in any missing pieces in knowledge and skill, as well as help guide in the right direction