

# CyberCamp 2021 Technical Requirements for Participation

## Device Requirements

You must have one of the following devices in order to participate in the camp:

- Microsoft Windows laptop or desktop
- Apple macOS laptop or iMac
- Chromebook

## Connection/Zoom Requirements

The CyberCamp will be held via Zoom and students will login to a remote computer to access required software. For this reason, a strong network connection is required. Please follow these instructions to test your connection speed: simply Google "Google Speed Test" and click the blue button that says "Run Speed Test".

Please note, to run Zoom and utilize the remote connection at the same time, a minimum speed of 2-4mbps is required. The *minimum* requirements are listed below. Higher bandwidths are suggested for optimal performance.

- Zoom
  - o Zoom account
  - o Speakers and microphone (built-in or USB plug-in)
  - o Webcam (not required but preferred)
  - o 800kbps/1mbps (up/down) minimum
- Remote Connection
  - o 1-5mbps

## VMWare Horizon Requirements

Students will be using VMWare Horizon to connect to a remote PC with all necessary software for participating in the camp. VMWare Horizon can be used via a *web browser (HTML)* or students can install the *client application*. Please see below for computer requirements to install and run VMWare Horizon.

- Requirements to Install and Run Client Application
  - o **Microsoft Windows**
    - 32-bit or 64-bit operating system
    - 1 GB RAM (minimum)
    - Direct3D 11 supported graphics card
    - Microsoft .NET 4.5 or later installed
    - Windows versions supported:
      - Windows 7 SP1
      - Windows 8.1 (update 3)
      - Windows 10
    - Go to **Settings** → **System** → **About** to find your device specifications

- **Apple macOS**
  - 64-bit Intel based Mac
  - 2GB RAM minimum
  - Horizon Client 4.0 or higher
  - macOS versions supported:
    - Mavericks, Yosemite, El Capitan, Sierra, High Sierra, Catalina
  - Click the **Apple** in the top left-hand corner and then click **About This Mac** to find your device specifications
  
- Requirements to Use Browser Version (VMWare Horizon via HTML)
  - Google Chrome – 77/76 or higher
  - Internet Explorer – 11
  - Safari – 12 or higher
  - Mozilla Firefox – 67/68 or higher
  - Microsoft Edge – 42/44 or higher