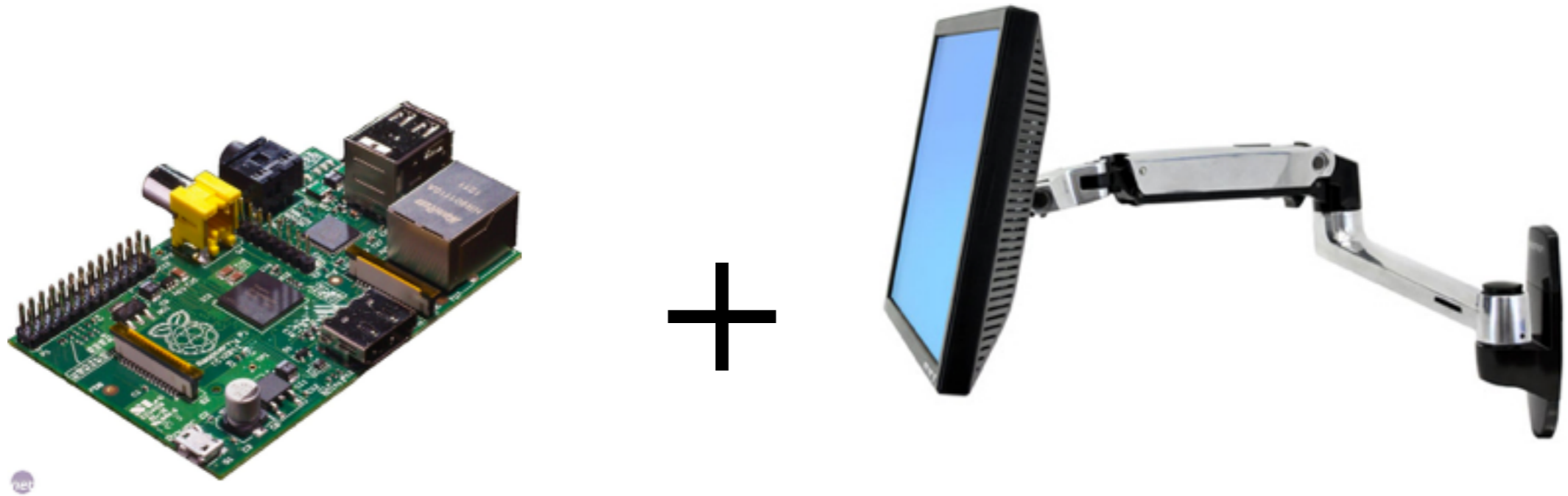


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# DDS

## Digital Display System



Raspberry Pi units with monitors throughout WVH

They display slides with relevant information for their location

# How it works

Using Wordpress to add/edit/delete slides + more later



Using Python to render the slides on the Raspberry PIs



# Wordpress Plugins

Wordpress Core is written in PHP

You can write more PHP Code to add functionality to the  
Wordpress install

For example there is a plugin that allows you to login to  
Wordpress with your CCIS Account

We need to write plugins that will talk with the PIEs and  
manage content

# The Parts to Work On

## Wordpress Install

Install and configure Wordpress on the DDS Test Server  
(Linux Command Line)

## Wordpress Plugin 1 (DDS API)

The code that will respond to requests from the PIEs and issue commands like:

Show <http://dds-server.ccs.neu.edu/slide/1> for 10 seconds

Show <http://dds-server.ccs.neu.edu/slide/2> for 15 seconds

(PHP, Wordpress)

## Wordpress Plugin 2 (Slide Data Entry & Slide Template)

Part 1 - The code that manages the creation, editing, and deletion of slides

Part 2 - This plugin will also need to format the slides into HTML for the PIEs

(PHP, Wordpress, HTML)

# The Parts to Work On

## PIE Displays (Rendering Code)

Writing the code that will take the HTML from Wordpress and render it into an image for display

## PIE Displays (DDS API)

Writing the code to that will periodically request updates from Wordpress and keep track of the stuff that the Pi has to do

# The Parts to Work On

## Example Station

Putting together a Pi, monitor, and mount so that they all work together  
(Hardware project)

- PIE = Public Information Endpoint (Raspberry Pi)
- DDS = Digital Display System
- GUI = Graphical User Interface
- API = Application Programming Interface
- HTML = How Webpages are created