

CERN Alumni

Third Collisions

Navigating the Cybersecurity Cosmos

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The High-Energy Network
Le Réseau des hautes énergies

My Journey:

Breaking Internet of (Insecure) Things



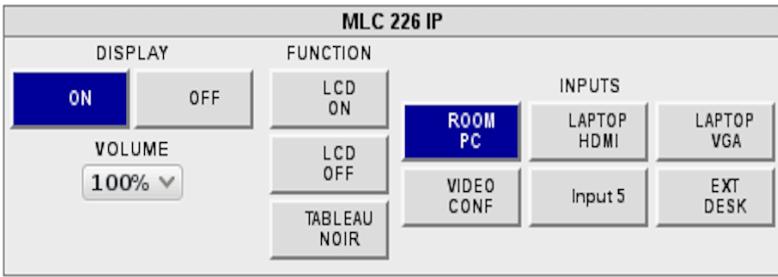
Printers are <3

COME AFTER LUNCH

Car number plate readers



Conference room controllers



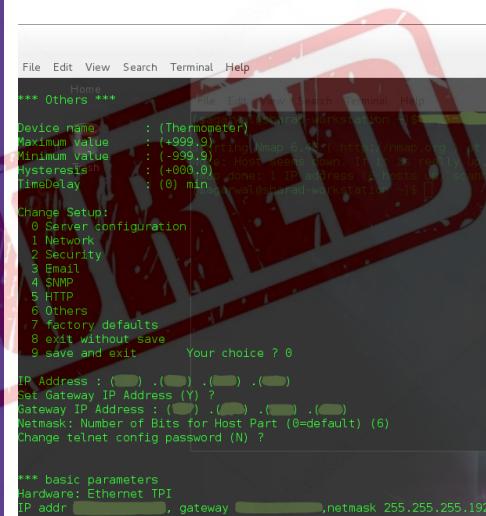
Meeting room projectors

The main window is titled 'EPSON' and 'Projector Control'. The left sidebar lists 'Signal', 'Settings', 'Info', 'Schedule', and 'Network' sections. The right pane is titled 'Image' and contains settings for 'Color Mode' (Presentation), 'Brightness', 'Contrast', 'Sharpness', 'Abs. Color Temp.' (7500K), 'Gamma' (0), and various RGB and RGBCMY color adjustment sliders. A secondary window titled 'EBFD2552 Web Rem...' is visible on the right, showing a simplified control interface with buttons for 'Power', 'Source' (Wired LAN, Wireless LAN, Input 5, BNC, HDMI, DP), and 'Operation' (Volume up/down, Mute).

Thermometer - TME - Settings



Thermometers



Oscilloscopes



Programmable
logic
controllers

My Journey:

Breaking Internet of (Insecure) Things



Automating Detection and Mitigation of Internet of (Insecure) Things

Software to Detect & Identify IoT Devices

```
sharad:iot_html_analysis SharadAggrawal$ python device_recog.py --ip <ip address>
Matrox Device Found
Firmware: 2.2.0.0008
Model: Monarch HD

classifiers:

<title>
    <device name>
</title>
<span id="ctl00_MainContent_DeviceNameLabel"> <device name> </span>
<span class="MatroxHD">
</span>
http:// <ip address> /Monarch/About.aspx
<span id="ctl00_MainContent_FirmwareRevisionLabel">2.2.0.0008</span>
sharad:iot_html_analysis SharadAggrawal$ █
```



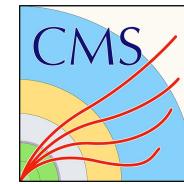
My Journey:

Breaking Internet of (Insecure) Things



Automating Detection and Mitigation of Internet of (Insecure) Things

Helping Physicists Discover the Next?



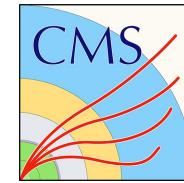
My Journey:

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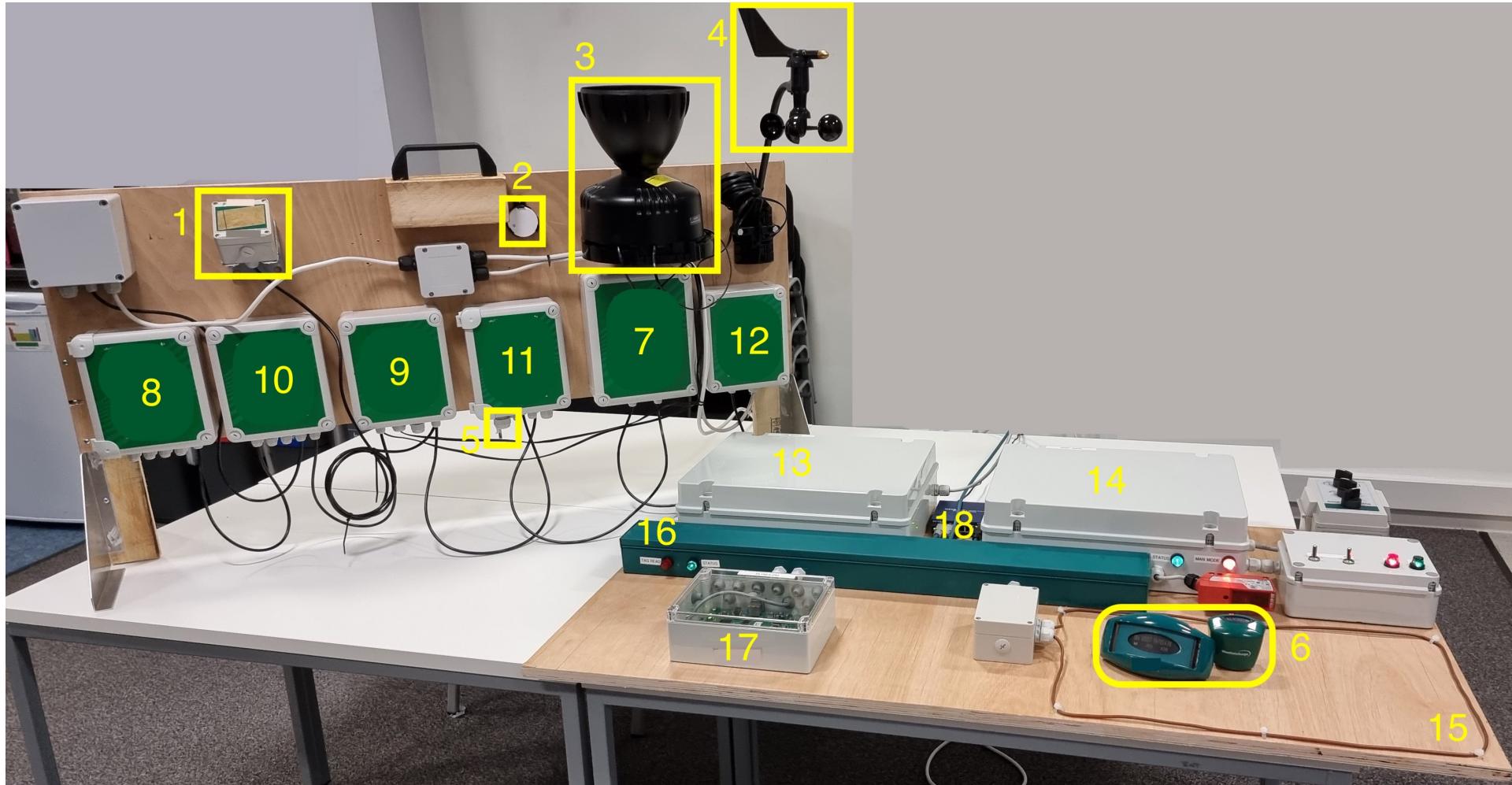
Automating Detection and Mitigation of Internet of (Insecure) Things

Helping Physicists Discover the Next?



Safeguarding Dairy Farms: Cows and Milky Success

Built a Table-top Dairy Farming Testbed for Cybersecurity



My Journey:

Breaking Internet of (Insecure) Things



Automating Detection and Mitigation of Internet of (Insecure) Things

Helping Physicists Discover the Next ?



Safeguarding Dairy Farms: Cows and Milky Success

Fighting Against Online Financial Fraud



Quantum Thanks!



<https://sharad1126.github.io>





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