

Build, Hack, and Explore VR Learning in Engineering Technology for Healthcare

About Us



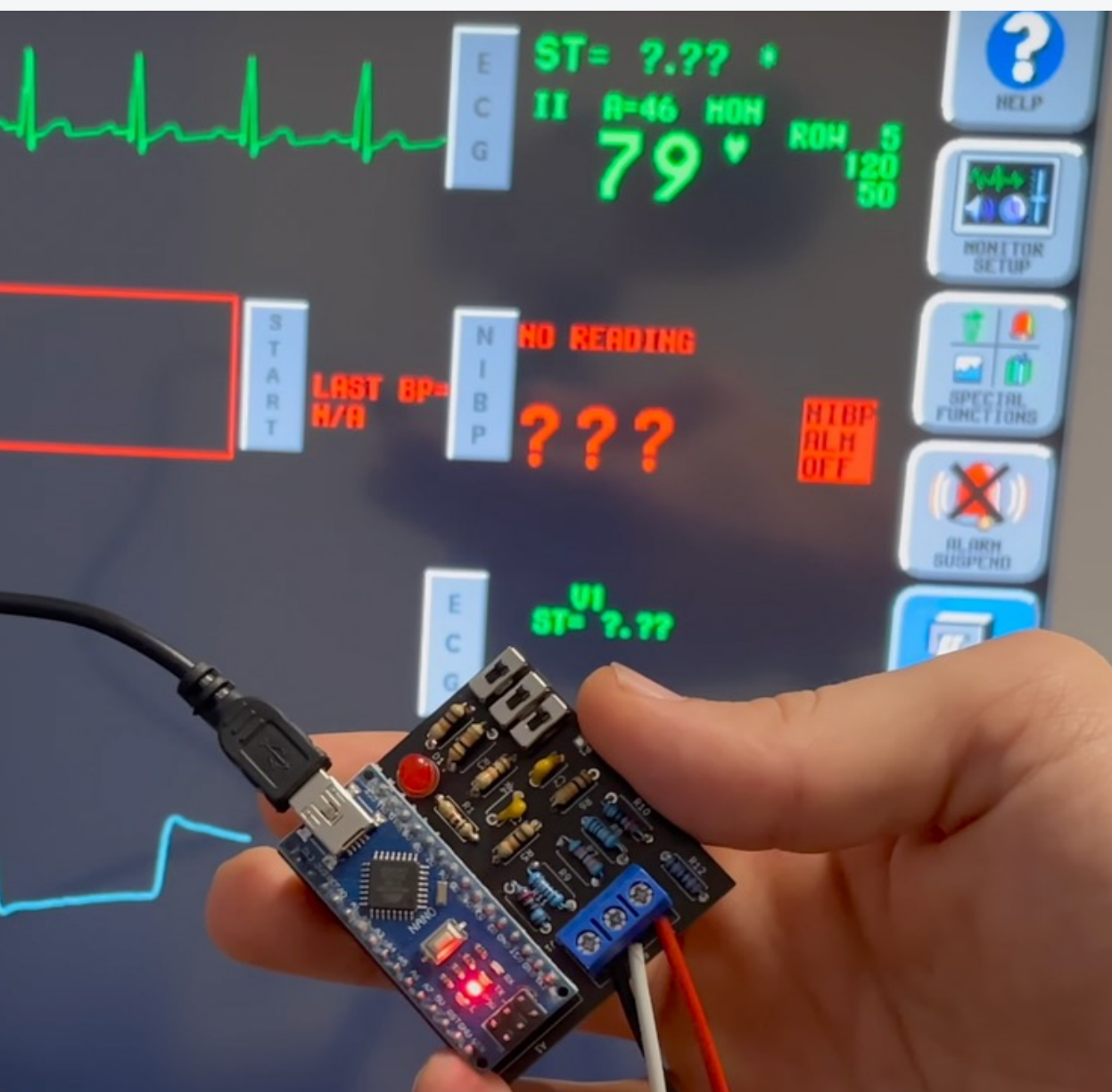
HTM WORKSHOP
HACKING HEALTHCARE

Previously Funded NSF ATE
Biomedical Engineering
Technology - Pathways to
Medical Device Manufacturing,
Networking, and Cybersecurity



FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

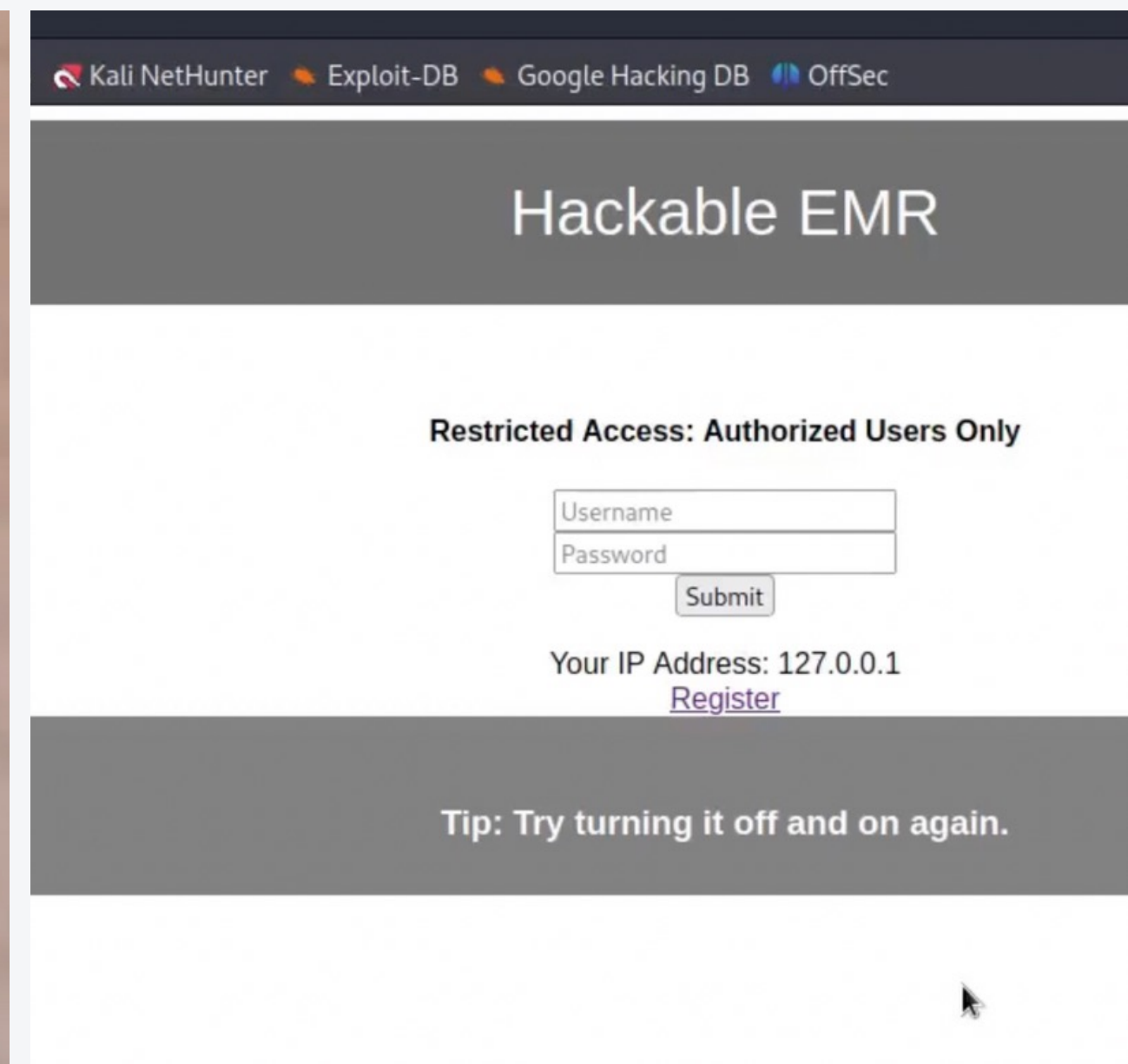
— Department of Defense —
DoDSTEM
Science · Technology · Engineering · Mathematics



Build your Own Biomedical



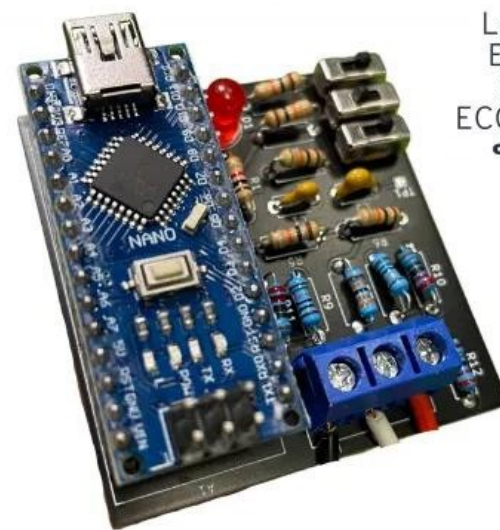
VR Training Modules



Hack an EMR

Build your Own Biomedical Device

ECG SIMULATOR

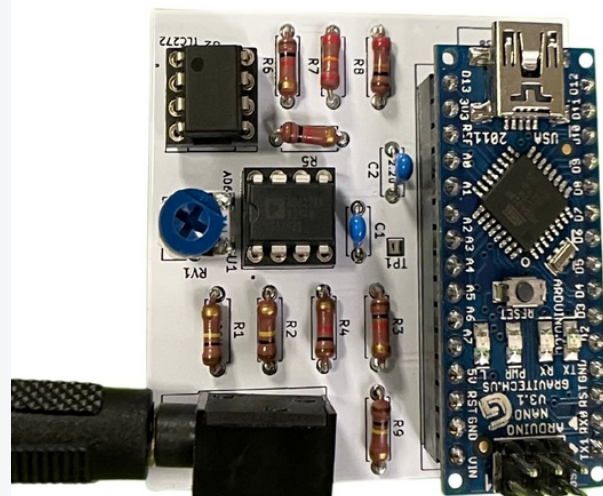


Learn about
Electronics
Soldering
ECG waveforms
ORDER NOW!

ECG Simulator

Learn about electronics, soldering, and patient monitors with our electrocardiography simulator.

ECG READER MEASURE YOUR HEARTS ELECTRICAL SIGNALS!



ECG Reader

Learn about electronics, electrical signals, ECG waveforms and artifacts as you build your own ECG device



START SOLDERING

TEST MEDICAL DEVICE

EDUCATE

Open Source Content and Videos

STUDENTS GET A BADGE FOR COMPLETION



ECG Simulator

Created on Mar 3, 2022

Learner successfully built an ECG and respiratory rate simulator

Badge Details

EARNING CRITERIA

Recipients must complete the earning criteria to earn this badge

The learner must

1. Identify correct electronic components
2. Solder components on to PCB board
3. Verify and test the board
4. Troubleshoot and fix any issues that occur

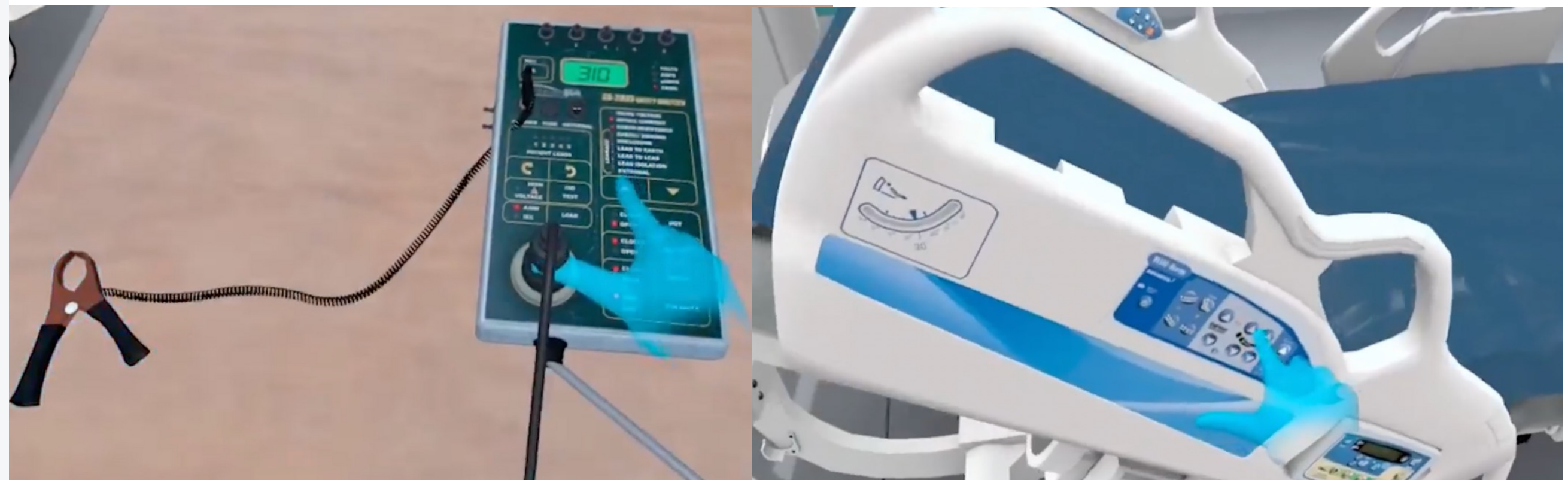
Examples at HTM-Workshop.com

VR Training



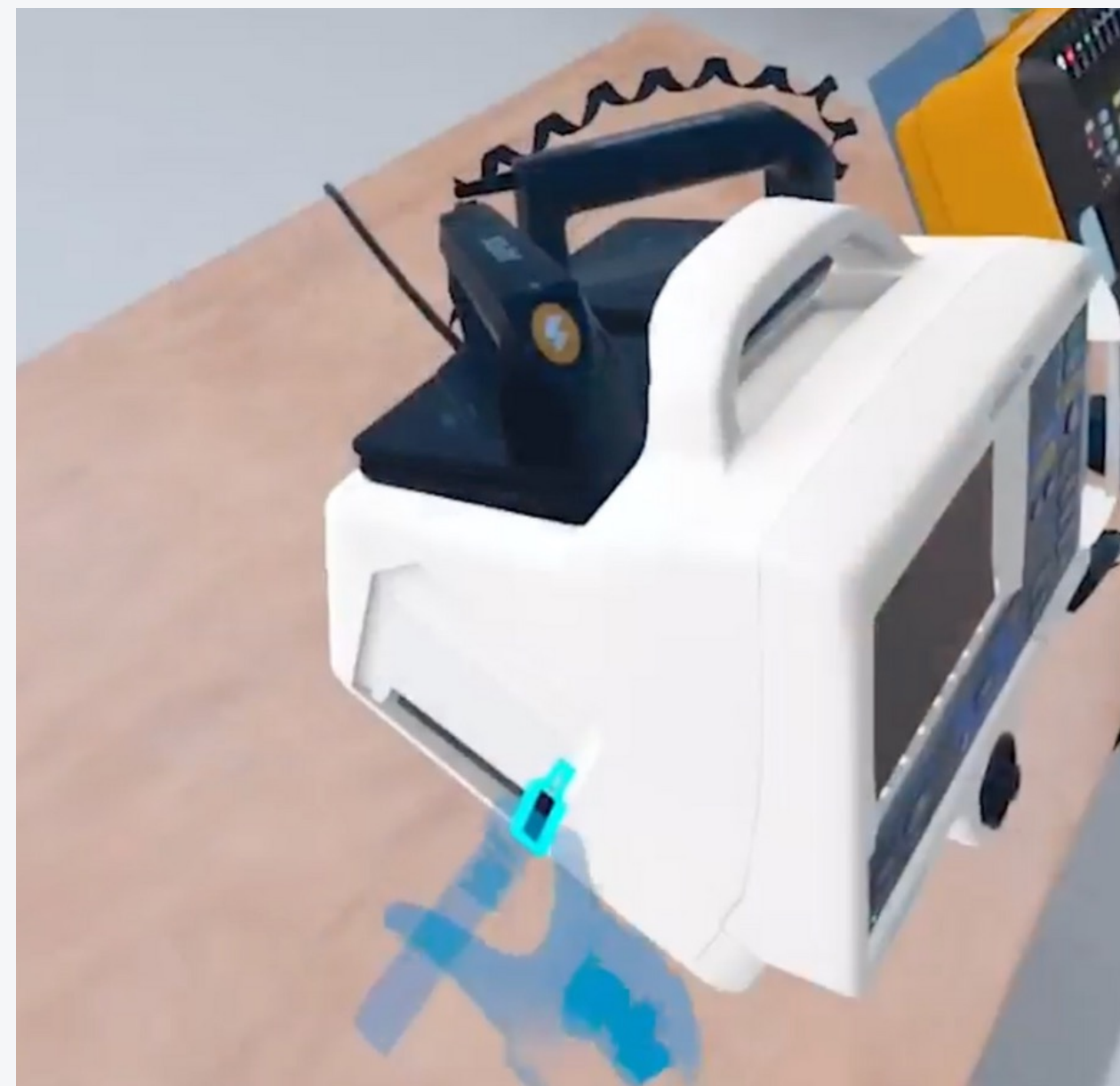
12 Modules ~ 20 minutes each

Topics Include: Preventative maintenance of defibrillators, X-ray battery replacement, Electrical Safety tests, suction regulator repair and more...

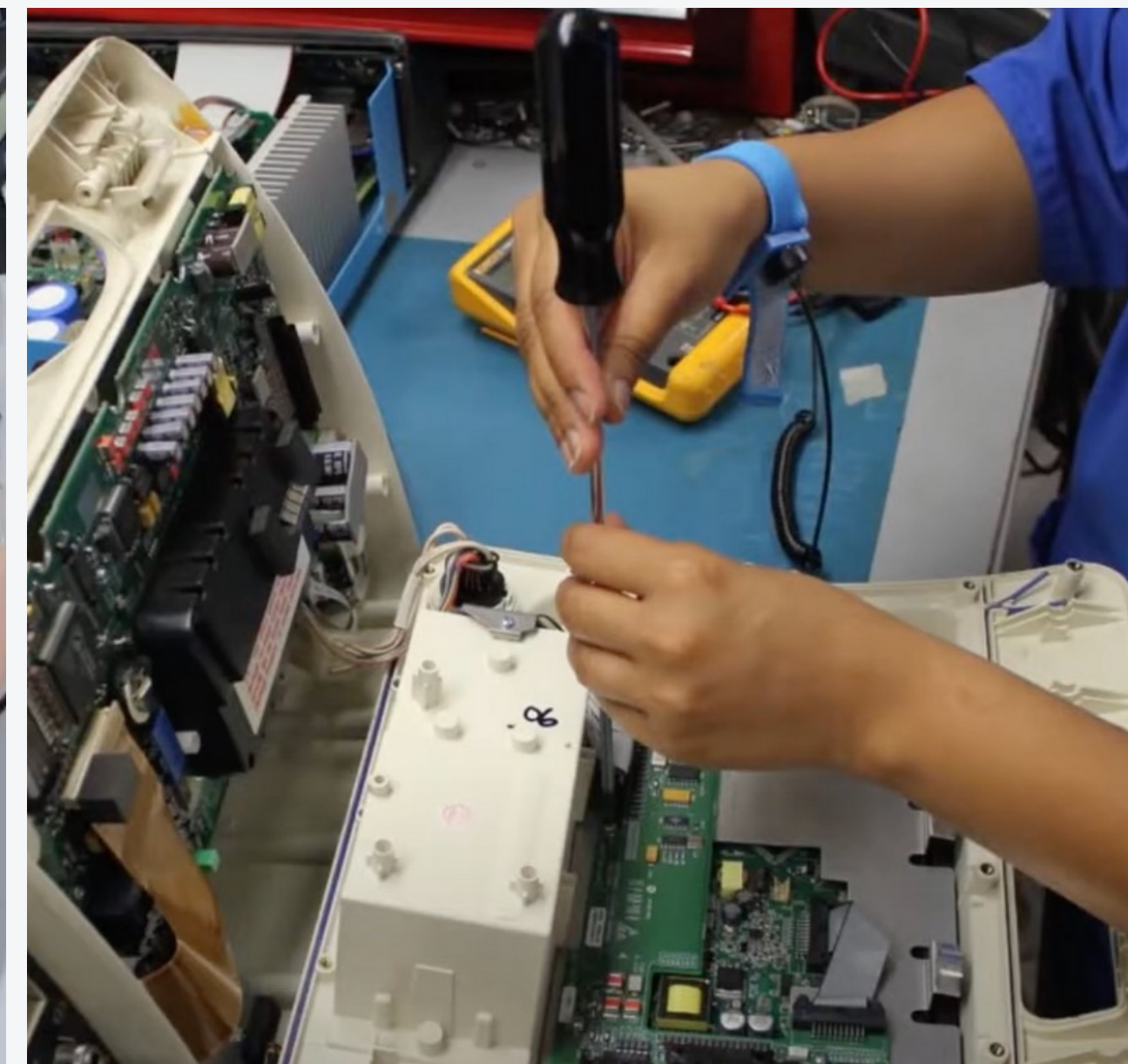




**Enter Virtual
Envionrment**



**Follow audio and visual
prompts**



**Move from virtual
environment to real life**

Examples

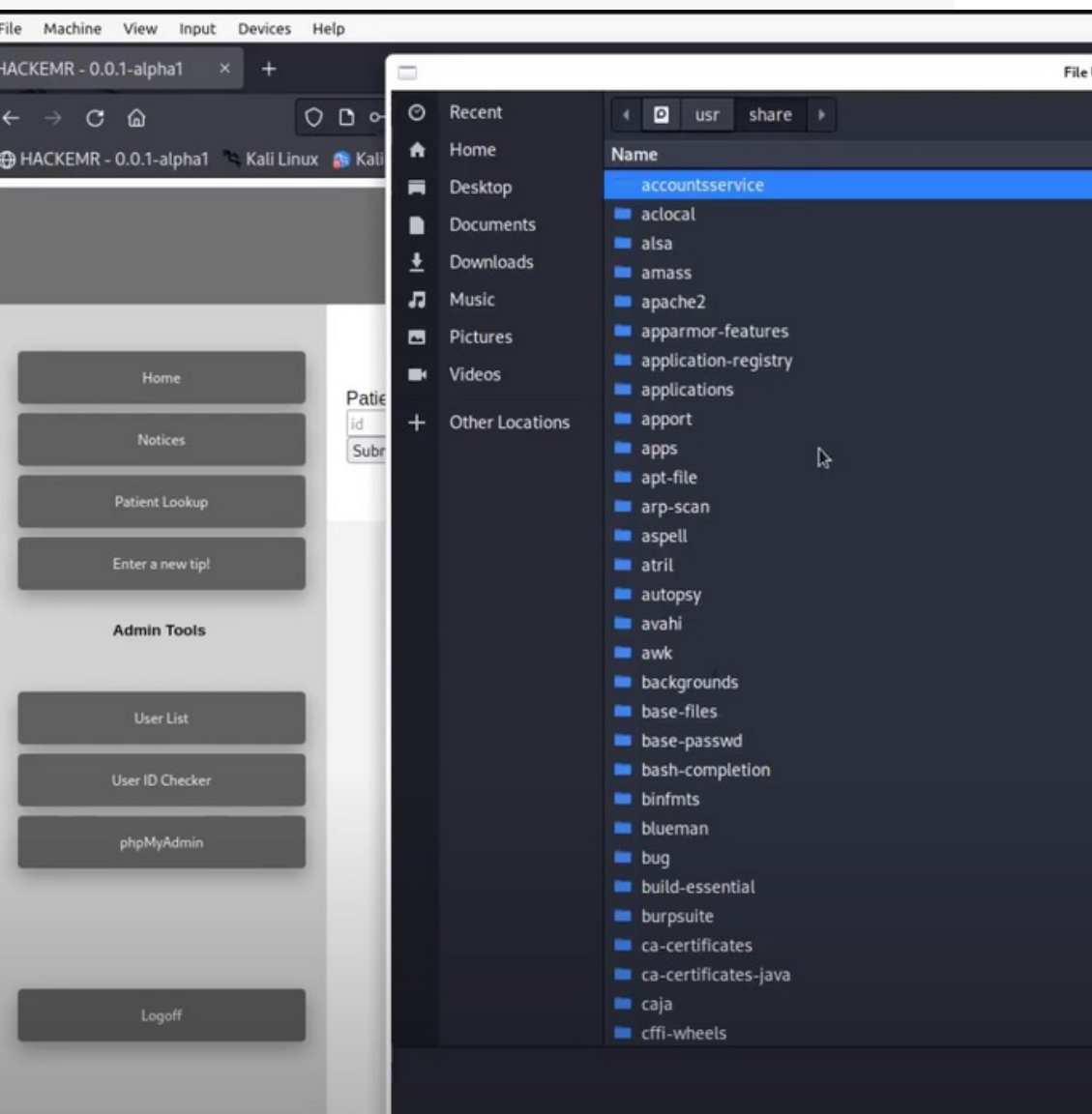
<https://www.nvrtlabs.com/library>

HACK Electronic Medical Records

Thing to do with hackable EMR

- **Cross site scripting**
- **Full access to database through sequel injections**
- **Run arbitrary commands through diagnostic page**

Built with PHP

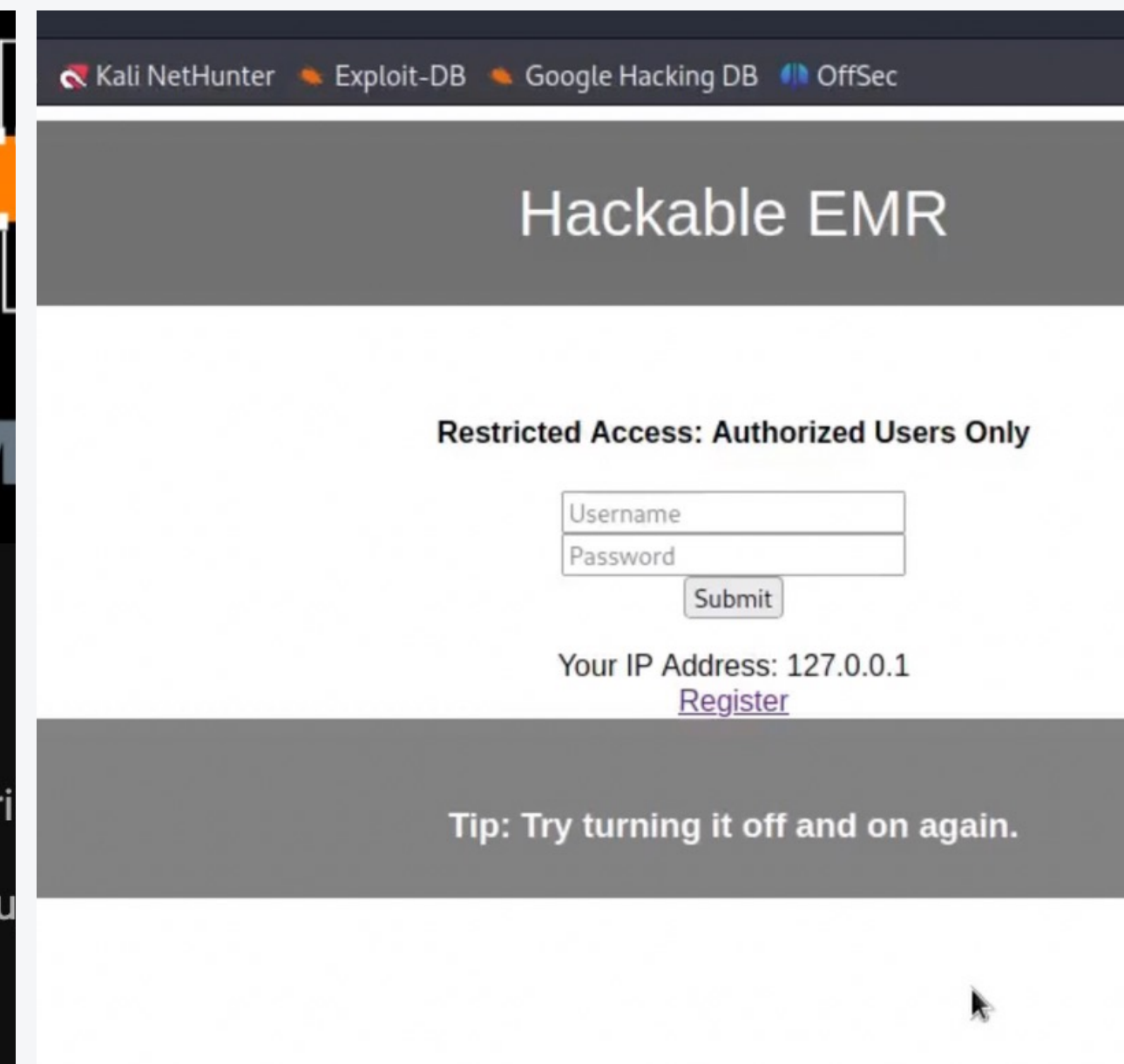
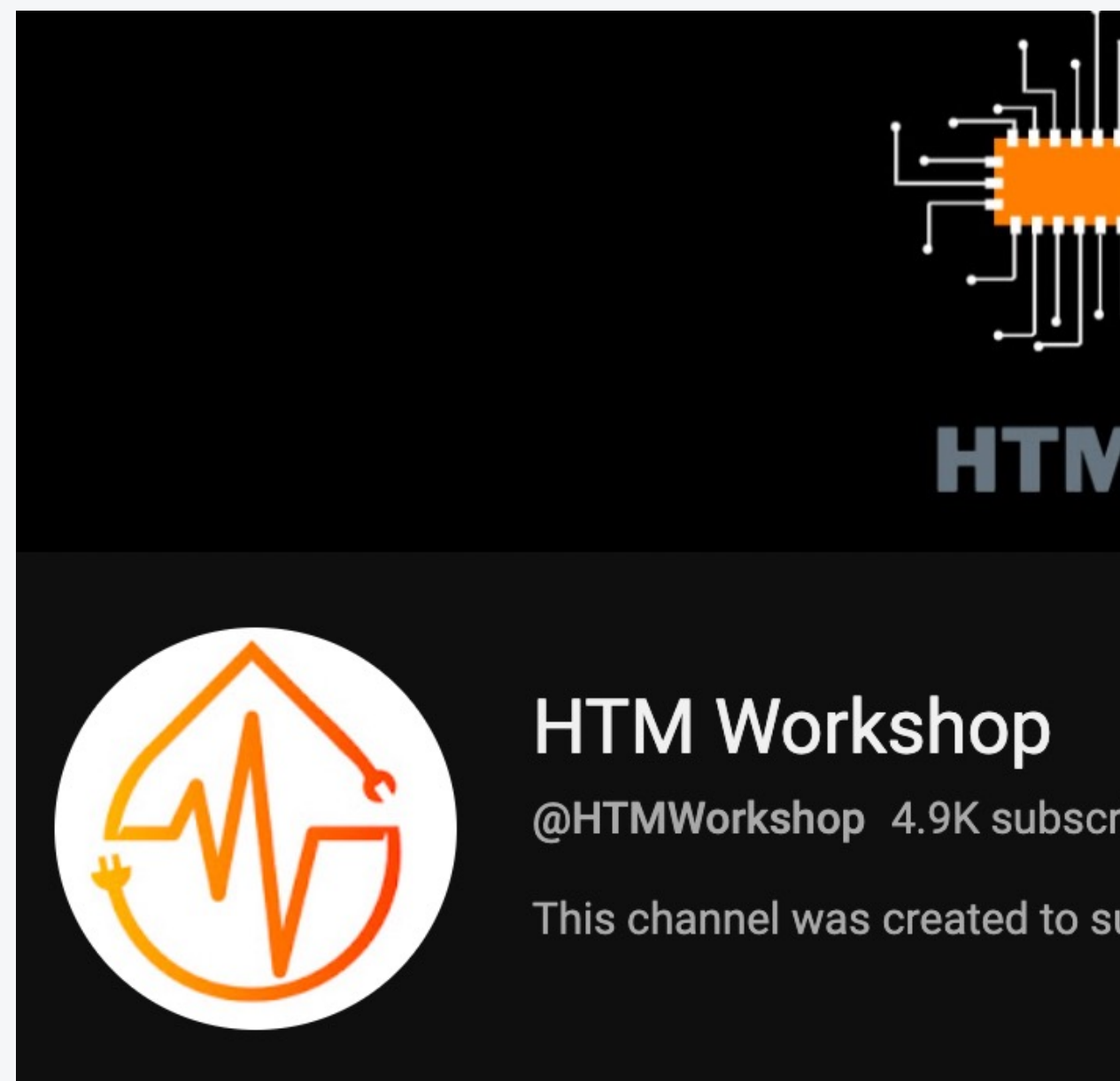


VirtualBox

Welcome to V

VirtualBox is a powerful x86 enterprise as well as home feature rich, high performance the only professional solution Software under the terms of version 3. See "[About Virtu](#)

Presently, VirtualBox runs on and supports a large number



**Download and Run as
Virtual Machine**

Follow Youtube Tutorials

Practice and Discover

Examples

https://www.youtube.com/channel/UCBkQn_WucQ8YpzRFY3EYqMQ

But that's not all!

**VR trial, Kits, and
more!**

