

JACK O'SULLIVAN



CURRICULUM VITAE

GITHUB
DEVPLAYER0
EMAIL
J@CKOS.IE
DATE OF BIRTH
2ND OF JULY 1998
LOCATION
BLACKROCK, DUBLIN



EDUCATION



SECONDARY
KILKENNY COLLEGE
(2011 - 2017)

UNIVERSITY
COMPUTER SCIENCE

TRINITY COLLEGE DUBLIN (2017 - PRESENT)
GRADES: FIRST YEAR: I (FIRST), SECOND YEAR: I (FIRST)



PROJECTS

CV OS

CVos "converts" a PDF into a bootable disk image (based on Linux) which can view itself - while remaining usable as a PDF! This very CV can be booted on bare-metal or in a virtual machine, using either MBR or UEFI. This is possible since the PDF header only needs to appear within the first 1024 bytes. See Github for more.

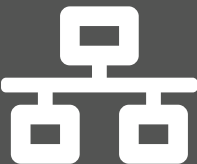
 [devplayer0/cvos](#)

HOMELAB

Collection of hardware running a 'home' network (primarily from a Dell R710) with services including a custom-built Linux router (nftables + BIND + ISC DHCPD), Ubiquiti AP, 10 gigabit networking, NFS, Kerberos, SMB, CUPS, PXE booting, a Matrix homeserver and Jellyfin media server amongst others. Powered by Alpine Linux, virtualisation via libvirt with KVM and containerisation with Docker and LXD.



DOCKER DHCP PLUGIN



Docker plugin providing a network driver which allocates IP addresses (IPv4 and optionally IPv6) via an existing DHCP server (e.g. a router). When configured, can allow a container to be accessed on an existing network like any other box. Used extensively in homelab.

 [devplayer0/docker-net-dhcp](#)

WEBSITE-NG

Platform for containerised webspaces. Webspaces allow members of a community (such as a university) to host their website on shared infrastructure. Traditionally, a subdirectory is provided to each user with support for some server-side scripting (e.g. PHP). website-ng brings the webspace idea into the modern era with every user getting a VM-like container (provided by LXD). SSL is fully supported with SNI-based transparent proxying, or via SSL termination on the default subdomain.



 [netsoc/webspace-ng](#)

SOCKIT



Socket provides a Lua firmware (using NodeMCU) and a Flutter-based app for controlling a smart socket which is powered by an ESP8266 micro-controller. It was designed for use with the Sonoff range of products and enables zero-configuration usage using multicast networking (once WiFi details have been saved).

 [devplayer0/socket](#)

OPENET

2018 INTERNSHIP

Three month summer internship as a member of the Labs team. Significant role realising the design of Openet's new 5G platform, upon which upcoming products are based.

2019 INTERNSHIP

A further three months, this time on a core engineering team designing and building a key 5G component based on the new platform built in 2018.

TECH SKILLS

PROGRAMMING

EXTENSIVE KNOWLEDGE

Java	Python	
Assembler		C
Rust	HTML & CSS	
Dart	Unix shell	Lua

TOOLS / FRAMEWORKS

A WIDE RANGE



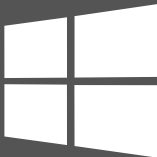
SYSADMIN

SIGNIFICANT OS EXPERIENCE



Extensive experience managing numerous systems running Arch Linux for approximately 4 years, Debian and Ubuntu in years prior. Very familiar with use of the command line.

Power user of Microsoft's operating system for many years, some experience with Active Directory. Experience using command line (including some PowerShell).



macOS Built and maintained a Hackintosh (regular PC running Apple's OS) for over a year.

ACHIEVEMENTS

ECSC 2019

EUROPEAN CYBERSECURITY CHALLENGE - TEAM IRELAND MEMBER

BSIDES BELFAST CTF

2018 AND 2019 2ND PLACE WINNER

ZERODAYS CTF

OVERALL WINNER (TCD TEAM) - 2018 AND 2019

HACKTRINITY CTF

2018 OVERALL WINNER AND 2019 PRIMARY CHALLENGE DESIGNER

BTYTE 2015

INDIVIDUAL RUNNER-UP AND GOOGLE AWARD

APPS4GAPS 2014

BEST WORKING APP AND OVERALL WINNER

EXPERIENCE

TRINITY COLLEGE DUBLIN

NETSOC (SOCIETY)

Committee member (general officer in 2017-18, webmaster in 2019). Junior sysadmin from early 2018, primary sysadmin since 2019. Responsibilities include managing Netsoc's online presence, as well as managing a number of physical servers located in TCD and their services (LDAP, webspaces, mail etc.)