YOSAFAT MARSELINO AGUS

Bandung, West Java, Indonesia
Phone: +62-82237616615 ⋄ Email: ninoagus@protonmail.com ⋄ Website: nnag.me

OVERVIEW

Linux systems administrator with 2 years of experience. Specialized on analyze and provide the right combination of IT components to achieve a specific goal, designing the work environment and utilizing the most efficient algorithm for the task and integrating the security component of the system. Seeking IT specialist and Network engineering opportunities where i will solve complex problems and challenges using advanced technology and best practices.

Key Skill: Python, C, Bash Scripting, Linux, GNU Utils, KVM, Docker, Networking

EDUCATION

Telkom University, Bandung   August 2015 - August 2020
B.S. in Electrical Engineering

EXPERIENCE

GCI Design, Telecom Infra Project Community Lab   January 2022 - Present
System Integrator   Bandung, Indonesia

- Conduct compatibility test of EdgeCore AS7316 Cell Site Router various Network Operating System (NOS) like DANOS from Danos Project, DentOS from Linux Foundation, Sonic from Microsoft and OcNOS from IPInfusion. This test involves SoC compatibility analysis on the Linux Kernel Stack failures.

- Setup the trial environment and conduct trial on EdgeCore OpenWiFi access points OAP100 and EAP101 and HFCL OpenWiFi access points ion4x and ion4xe. Integrate the access points into TIP's access point controller uCentral. This trials performed using iperf3 as bandwidth measurement, docker for firmware build environment setup and uCentrall deployment.

- Setup Parallel Wireless Hetnet Gateway (HNG) on top of Red Hat Enterprise Linux. Integrate the Hetnet Gateway wit Magama Core as LTE core network and Parallel Wireless Coverged Wireless System as BBU. This trial involves Red Hat Enterprise Linux 9.0 as bare-metal Operating System, Linux's Kernel-based Virtual Machine (kvm) as hypervisor, Parallel Wireless' Hetnet Gateway software stack as RAN Aggregator.

- Assist the lab trial of Baicells 5G Indoor solutions on top of Red Hat's Open Container Platform integration.

- Conduct setup of JIESAI's 5G indoor solution, performance analysis of JIESAI 5G core NFVs and perform end-to-end trial of JIESAI's 5G Core, BBU, and RU. This trial involves Linux perf call flamegraph analysis on NFVs , 5G protocol stack analysis using Wireshark, end-to-end bandwidth measurement using iperf3, packet forwarding using Linux's iptables, and Bash scripts for test automation.

- Setup, maintain and automate Telecom Infra Project VPN network using WireGuard, Django and bash scripts.

Telecom Infra Project, Community Lab   April - December 2021
Engineer   Bandung, Indonesia

- Digital Talent Scholarship Technical Trainer and IT Support for DTS OpenRAN 2021. Maintain the core network and VPN network used by the participants and trainers.
- Trainer of Network Security Course, at Train4Best (August - October 2021).
- Developed first Open-RAN Telecommunication Network of 4G with Baicells Nova & Parallel Wireless Small Cell solution with Open Source solution MagmaCore in Indonesia
- Deployed six magma lte open core on RedHat Cockpit, for Training event and simultanious integration test of Parallel Wireless' 4G Open RAN Small Cell solution
- Wrote automation scripts in bash and python for imporved magma NMS lifecycle and orchestration

Cyber Security Researcher of Telkom University   November 2019 - July 2021
Researcher   Bandung, Indonesia

- Researched, Deployed and Implemented Security Orchestration, Automation and Response software stack based on Suricata IDS & IPS and elastic search
- Researched, Deployed and Implemented NTRU PostQuantum Resistance Encryption system on ARM based IOT envronments
- Researched and Deployed Quantum Resistant Blockchain for Distributed Ledger Technology in IoT

Batik Air Group   June - July 2018
Intern   Balaraja, Indonesia

- Develop Ajax and PHP based DMS system form employee cerification database management

ACCOMPLISHMENT

TIP Indonesia Webinar : Secure Aritifical Intelligence Internet of Things   August 27th 2021
Speaker   Bandung, Indonesia

- Presented our research result on the implemantation of post-quantum encryption method (NTRU) on IoT Environment

27th ICT 2020 International Conference   October 2020
Presenter   Bali, Indonesia

- Presented publication paper entitled An Efficient Implementation of NTRU Encryption in PostQuantum Internet of Things

ICE2T 2019   August 2019
Presenter   Bandung, Indonesia

- Presented publication paper entitled On The Possibilities of Cybercrime in IoT Devices

PUBLICATION

An Efficient Implementation of NTRU Encryption in Post-Quantum Internet of Things
October 2020

- DOI : 10.1109/ICT49546.2020.9239560
- URL : https://ieeexplore.ieee.org/abstract/document/9239560

On The Possibilities of Cybercrime in IoT Devices
March 2020

- URL : http://www.testmagzine.biz/index.php/testmagzine/article/view/5138

PROJECTS

Smart Energy Monitoring System - RISPRO LPDP   **Feb 2020 - July 2021**

- Researched and deployed NTRU cryptography on ARM based devices for communication over MQTT protocol
- Optimized the performance and resource usage of NTRU crypotgraphy and compared the implemantation performance with the existing cryptography standards i.e. RSA

AI-Based Stock Prediction Project - Vezpal   **June 2019 - July 2021**

- Perform code optimization on tensorflow stock prediction model based on Python and C
- Deploy django web service and microservices for stock prediction model based on django redis