Volodymyr Huti

Profile

A self-motivated and dedicated software engineer who is passionate about analyzing and solving problems with a background in computer networking. I'm experienced in developing and debugging networking solutions for residential/enterprise gateways. My main areas of interest include low level development, Linux kernel and it's networking subsystem, and fintech - automation of investing/trading operations. Currently developing a Linux Switchdev driver for the ASIC vendor.

Skills

Programming Languages:

C/C++ Linux socket programming, STL, Boost, OOP, algorithms, data structures.

Strong knowledge of programming concepts.

Networking L2/L3 - strong knowledge of switching, routing and associated protocols

L4 - hands on experience with common protocols like DHCP/DNS/HTTP/... as well, usage/configuration/debugging of associated services/applications

Network offloading to ASICs using Switchdev/SONiC models Hands on experience with FIB offloading implementation

Linux Kernel Well aware of kernel subsystems, common interfaces, and mechanisms

Practical experience with development of Switchdev drivers

Skilled in the kernel research, analysis, debugging and troubleshooting

Versed in the networking implementation, especially routing and neighboring

Debugging & Userspace: GDB, Valgrind, PDB, Linux tools ecosystem ...

Network Kernelspace: Ftrace and associated interfaces, GDB, objdump, kasan ...

Virtualization Traffic generators: Ixia, scapy, Network simulators: GNS3

Scripting Bash scripting, process/test automation, Linux system administration,

advanced features, like bash autocompletion scripting.

Build Systems General knowledge of buildroot and autotools suite
Fintech Strong knowledge of trading/investing fundamentals

Development Tools Vim, I3, urxvt, Git, UMLet ...

Operating System Linux (highly preferred), macOS, Windows

General Some knowledge of IATEX, Python and basic frontend stack Languages Ukrainian (native), English (Upper-Intermediate), Russian

Experience

Plvision
Software Engineer

Oct. 2019 - Present
Lviv

Took part in the development of Switchdev driver for the ASIC vendor

- Implemented FIB offloading, both driver and SDK sides
- Cooperated with architects during features designed
- Performed further stabilization/maintenance/troubleshooting of the implemented features
- Helped with debugging of the newly found kernel bugs
- Did research and analysis of Linux behavior for uncommon configurations and corner cases
- Cooperated with Q&A team durion test design
 - Took part in test validation and sometimes implementation
- Took part in the development of SONiC course for the new engineers Have reasearched and documented the most common developmented activities

Global Logic C Developer Feb. 2018 - Oct. 2019 Lviv

Worked on two projects developing gateway middleware for multiple European customers. Responsibilities included:

- Was responsible for troubleshooting middleware issues
 Has resolved over 100 issue tickets, including crash fixes, resource leakage, wrong configuration ...
- Took part in GUI porting from one gateway to another Has successfully ported multiple pages, like Index and WiFi Fixed emerging issues and crashes afterward
- Took part in the driver porting and further troubleshooting

Education

National University Lviv Polytechnic Computer Engineering Lviv

2016 - 2020