

Igor Pylypiv
Software Engineer
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Professional Software Engineer with experience in computer networking and Linux kernel, fluent in C, know C++ and Python, comfortable with other programming languages. I care about the development process and always try to make it more efficient.

*Silver Peak Systems | **Software Engineer** | Aug 2017 - Present | Santa Clara, CA*
Linux-based networking platform for SD-WAN (Software-Defined WAN)

- Led and successfully finished a major codebase migration project
 - **Upgraded Linux kernel from v2.6 to v4.4 and later to v4.19**
Ported over a hundred patches (mostly related to Kernel Bypass, sk_buff handling). While porting changes found a couple of bugs in the f71808e_wdt watchdog driver. Submitted fixes upstream and they were accepted and backported to LTS releases
 - **Transitioned the OS from Fedora Core 6 (2006) to a custom-built OS with Yocto Project**
Ported patches from FC6 .rpm packages to BitBake recipes (e.g. glibc, dhcp, openssh, etc.)
 - **Migrated the core product's repository from SVN to Git**
Maintained two repositories in sync for about six months, the migration also included a codebase file structure changes which made the migration more challenging
- Debugged and fixed various user-space and kernel-space packet processing issues, kernel crashes, memory double frees and corruptions, performance degradations and bottlenecks
- Improved the flows per second (fps) processing speed from 3.6k fps to 15.5k fps (~400%)
- Enabled kernel support for "Accelerated Networking" feature (Azure) and "Enhanced Networking" feature (AWS)
- Worked with Cloud Security vendors to identify and fix IPsec IKE connectivity issues
- Mentored newly hired team members and helped them with getting up to speed

*Great Lakes Data Systems | **C++ Software Engineer** | Sep 2016 - Aug 2017 | Carlsbad, CA*
Windows-based API translation application for device and service provisioning

- Added static code analysis to the development process
- Improved provisioning command parsing with a stack data structure
- Decreased average API response time by placing commands handlers in order of their frequency

*GlobalLogic | **Junior Embedded Software Engineer** | Oct 2014 - May 2016 | Lviv, Ukraine*
Linux-based middleware for residential wireless routers

- Implemented WAN DSL diagnostic API for TR-069 (CPE WAN Management Protocol)
- Integrated new wireless device drivers versions into the product
- Got a deep understanding of how wireless routers work and how they drive the Internet
- Participated in all team building events and happy hours

Bachelor degree in Computer Science

Lviv Polytechnic National University, Institute of Computer Science and Technology, Lviv, Ukraine