Eugene G. Crosser

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**Software Engineer: Linux Kernel, Network
Protocols, High Availability and Scalability.**
Experience in a variety of technologies, operating
systems and languages. More than 30 years in
software and systems development and operations.

▬▬▬ Experience

2016-now   **Senior Linux Kernel Developer** at **1&1 IONOS Cloud** (previously ProfitBricks GmbH)

Development of pure kernel implementation of Ethernet-over-InfiniBand.

Develpment and maintenance of Software Defined Network infrastructure for virtual hosting enviroment, based on Ethernet-over-InfiniBand, OpenVSwitch, BGP-EVPN, and other industry-standard technologies.

2007-2016   **Advisory Software Engineer** at **IBM** (IBM Science & Technology Center, Moscow)

Development of Linux driver (`qeth`) for s390 networking hardware.

Familiar with Network Architecture, Virtualization, Linux network code base, kernel development culture and patch submission process. Close collaboration with Firmware development.

Until 2012, worked on z/VM TCP/IP subsystem, specifically on the implementation of SSL (TLS).

1995-2007   **Software developer, team leader, head of section** at **EDN Sovintel** (previously **Teleross**, previously **Sovam Teleport**)

Architect and developer for a project that became one of the biggest ISP in the country. Played key role in choosing technical solutions and defining architecture for the ISP services platform.

Development team leader for the Provisioning & Billing system, including authorization modules for Web, Email and other services, redundant and cryptographically secured transport framework, SQL backend database and more. Subsystem for processing credit cards and activation codes featured a strong data protection scheme, proven by many years of operation without breach.

1993-1995   **Consultant** at the Moscow office of **Coudert Brothers LLP**

1989-1993   **Programmer** at the **Small Venture PIEJSM**

1985-1989   **Programmer** at the **Central Computer Center** of the National Railway Ministry

1982-1985   **Engineer** at **Central Radio Engineering Laboratories**

Standalone Open Source Projects

2014   **Namecoin backend for PowerDNS** - bridge to represent data from blockchain based name storage via DNS protocol, written in Haskell. `http://www.average.org/pdns-pipe-nmc/`

2013   **UNIX PAM Challenge-Response authentication module** that uses crypto tokens capable of HMAC-SHA1 functionality. `http://www.average.org/chal-resp-auth/`

2003-2007   **Zmscanner** - modular content filter for Zmailer and Sendmail MTAs, designed to be fast and efficient and thus suitable for high traffic mail systems. Features virus scanner based on **ClamAV library**. `http://www.average.org/zmscanner/`

2001   **Netwatcher** - simple network "health monitor" with low resource consumption, easily extensible using Perl5 object model, controlled by Web based interface. `http://netwatcher.sourceforge.net/`

1999-2001   Reference implementation of **WHOSON protocol** - a tool facilitating "POP before SMTP" authentication for big distributed mail relays. Supported by Zmailer out of the box. `http://whoson.sourceforge.net/`

1997-2001   **Photopc** - library and command line tool to control certain class of still digital cameras over serial line using proprietary protocol that was reverse engineered. Runs on many flavors of UNIX, and, thanks to code contributions, on Windows and DOS. Popular **gPhoto** digital camera control tool was originally based on the Photopc code. `http://photopc.sourceforge.net/`

1992(?)   Original support for alternative character sets on **Linux VGA text console** (drivers/char/tty_ioctl.c, drivers/video/vgacon.c, loadfont, loadkeys and mapscrn utilities. These where later mostly rewritten by other people.)

1992-2000   **Ifmail** - software implementing **Fidonet** transport on UNIX platform and gateway between Fidonet message format and RFC822/RFC1036 mail/news message format. `http://ifmail.sourceforge.net/`

Education

1976-1982   **Moscow University**, Physics Department. Graduated with M.S. (equivalent) degree in Physics, 1982.

Publications

- An article published in Moscow University Herald, 1981.
- A paper in the proceedings of USENIX 1998 annual technical conference.

Some web resources related to my activities

- `http://www.average.org/software.html`
- `http://www.average.org/~crosser/`