

Age: 32
 E-mail: kaja.valek@gmail.com
 Driver's License: B

Education: Masaryk University (Applied informatics, Informatics in public administration, graduated 2016), Faculty of Informatics, Brno
 Industrial polytechnics (Applied materials – leather, plastics and rubber), industrial design, graduated June 2011, Zlin

Skills:
Development: **Python:** semi-advanced, active since 2012
JavaScript / TypeScript: post-beginner-intermediate, active since 2019, TypeScript since 2023
Java: beginner, basic understanding, some projects implemented in this language
GNU BASH: intermediate
PHP: Beginner, basic understanding, yet capable of implementing SW in OOP manner
C: Basic understanding, yet capable of implementing SW.

Operating Systems: **Debian / Ubuntu:** intermediate, active use since 2006
Fedora / RedHat Enterprise Linux: intermediate / semi-advanced, active since 2008, RedHat Internship
 For all of the systems above: Using command-line interpreter or SSH on daily basis

Containerization: **Docker / Podman:** active use since 2020, intermediate, capable of writing own Dockerfile/Containerfile deployments
Kubernetes / Helm: Beginner, incl Helm chart writing

CI/CD: **Gitlab CI/CD + GitHub Actions:** Practical experience, mostly with self-hosted runner.
Travis / Jenkins: Brief experience

Project tracking: Jira / Confluence

Experiences:

Prusa Development: November 2022-April 2023
 Firmware developer (Python3, SSH, Gitlab CI/CD – self-hosted runner). Development and tooling for automated 3D-printer testing.

Kyndryl Client Centre / IBM Global Services Delivery Centre (GSDC) / AT&T Brno Czech Republic:
 - April 2022-September 2022:

Software Developer, internal project development and maintenance, mostly in PHP 5.x

- November 2020 – March 2022:

Software Developer, “Bridges Team”, brief maintenance of IBM CLOUD cluster running Kubernetes, TypeScript experience w/ implementing a simple micro-service solution.

Employment change caused by employer (name change / division).

- August 2016 – September 2020:

Systems Deployment, AT&T, System installations (RHEL 7.x). Basic preparation for client and security check-ups.

System management and preparation (Networking, data storage – SAN/Fibre, LVM).

Employment change caused by acquisition by IBM GSDC, migration January 2020.

Red Hat Czech Republic Brno:

July 2015-June 2016

Internship: Anaconda/Rhinstaller team, Junior Software Engineer, automated Blivet library testing and Bachelor Thesis “Serialization of data storage configuration”.

September 2014: Network management and support (LAN), hosting professional multiplayer game tournament. Network infrastructure monitoring and correction, incl. Network infrastructure (eg. crimping, cable management).

Projects:

- **“DevOps”:**
 - **Docker / Podman containers:**
 - Own-written Dockerfile / Containerfile solutions to either run solutions (for example Source Dedicated Server by Valve Software) incompatible with base systems
 - Development-assistance) dev containers – NodeJS, Java, TypeScript, .NET Core 5.x
 - **Self-hosted solutions:**
 - **Gitea** (Self-hosted repository solution to avoid dependency on 3rd party software like GitHub)
 - **Password manager / Vault**
 - Self-hosted frontend for “BarterBot” (Nginx)
 - **Kubernetes / Helm:**
 - Intention to learn how to operate Kubernetes as well as Helm
 - Self-study at home
 - Completely-separated ecosystem self-hosted:
 - 1x Master
 - 2x Worker nodes
 - Self-hosted container registry using Docker
- **Development:**
 - **“BarterBot”:**
 - Formerly private project with focus on already-existing frontends (Telegram, Discord, ICQ)
 - Intention to stay active in development field
 - Implementations:
 - 1st – 10th: Python3, including ASYNC techniques (threading.Thread, asyncio)
 - 11th – 14th: NodeJS 14-16 / JavaScript, not utilizing basics without promises
 - 15th: TypeScript-based, major rewrite
 - Custom front-end using Vue3.js (TypeScript) as a own solution without dependency on 3rd party-projects
 - This project was and is also used by other clients as well, experience gained here was reused in next implementations
 - Multiple backends in various programming languages
 - SourcePawn
 - Java + Apache Maven (Oracle-based JDK / JRE, self-designed Docker container).
 - Connected via TCP/IP-based socket, data exchange in JSON
 - HTTPS Express-based (TypeScript / NodeJS) REST API (mainly for data exchange with Vue.JS frontend), Let’s Encrypt.
 - **AT&T: Management Portal:**
 - During employment in AT&T, 2019
 - Including proposed software architecture:
 - Backend: Python3 (LDAP + PostgreSQL interactions)
 - Frontend: PHP 7.x
 - Both endpoints connected via TCP/IP socket-based communication in serialized in JSON.
 - Actively using AT&T’s proprietary login solution.
 - **“screxec / scrstart” (“ScreenTools”):**
 - Developed own solution to mimic terminal multiplexer (SuperPutty), but fully BASH and text-only based
 - Implemented this solution to assist my daily tasks in AT&T.
- **General:**
 - **VirtualBox:** Actively using for development inside a Debian machine
 - **Libvirt / virsh / virt-manager:** Hobby experience, ran a VMs 10 OS fully virtualised on a IOMMU-based machine (Debian Host, Windows 10 guest, dedicated 10/12 of CPU cores).
 - Includes hardware pass-through (namely nVidia GPU).
 - **Visual Studio Code:** daily basis
 - **MS Windows:** Capable, daily-use
 - **Windows Server:** Basic experience, mostly with 2019 / 2008