

Jakub Mach

jakubma.ch

jakub.m4ch@gmail.com

github.com/chinese-soup

+420 720 769 824

EXPERIENCE

Showmax s.r.o.

CMS Backend Developer

Prague, Czech Republic

Dec 2022 – present

- Maintaining the Content Management System and its underlying services, implementing new features, creating reports, resolving issues – **Python, Django, PostgreSQL**
- Extending and maintaining asset APIs – **Python, Falcon, uwsgi, ElasticSearch**

O2 Czech Republic a.s.

Systems Administrator in Network

Prague, Czech Republic

Mar 2017 – Aug 2022

Day-to-day work included:

- Maintaining our team's infrastructure and monitoring - **Linux, KVM/libvirt, IPMI, Zabbix, InfluxDB, Grafana, Kickstart, Chart.js**
- Managing authoritative and recursive DNS servers - **Knot DNS, BIND, Nominum CacheServe**
- Responding to and troubleshooting incidents related to DNS infrastructure, creating helper scripts in **Bash**

Other than my day-to-day admin tasks, I've also worked on some internal projects, all written in **Python** & deployed using **Docker**:

- An internal web admin application combining 3 legacy databases into a central app – **Flask, SQLAlchemy**
- A Cisco IOS XR to XE configurations converter with a simple web user interface – **Flask**
- An InfluxDB measurement data migration/copy/move tool with the help of the **influxdb-python** library
- A service for enriching telemetry data from the different core network components of the IP Network teams – **Python** (BSPump streaming library, SQLAlchemy), **PostgreSQL, InfluxDB, Grafana**

O2 IT Services s.r.o.

Software Administrator

Prague, Czech Republic

Sep 2016 – Mar 2017

I've primarily worked on up-keep of several ticketing systems (specifically OTRS) deployed with different specifications & hardware depending on the client company. Some of my work included:

- Extending the OTRS instances, both through the plugin system and in the OSS codebase itself – **Perl**
- Maintaining the underlying VMs and their software – **RHEL/CentOS, MySQL, Bash**
- MySQL database migration of a legacy OTRS version mapping data to the latest version's DB scheme – **Pentaho Data Integration** (Spoon)

TECHNICAL SKILLS

Languages

- **Python** – Language I am the most comfortable with
- **Go, Swift** – Currently learning
- **C/C++, PHP, JS/TS** – Basic knowledge
- **Others:** Bash, SQL, InfluxQL, QML, HTML5, CSS3, LaTeX

Libraries: Django, Flask, SQLAlchemy, requests, PySide, BeautifulSoup, curses, dataclasses

Technologies: nginx, apache2, wsgi, InfluxDB, Grafana, Kafka, MySQL, PostgreSQL, ElasticSearch, Docker, Kubernetes

Tools: Linux, git, black, JetBrains IDEs, GitHub Actions, ffmpeg, ImageMagick, libvirt/QEMU, Ghidra, Ansible

EDUCATION

Secondary Technical School

GCSE - Information Technology

Prague 5 – Smíchov

September 2012 – June 2016

As my final GCSE project I've developed a full-stack chat application, preserving the user's connection to IRC servers (similar to BNC) and allowing them to continue chatting from anywhere using a browser.

Technologies used: Python (Flask), MySQL, wsgi, HTML & CSS (Bootstrap), JavaScript (jQuery)

PERSONAL PROJECTS

In my free time I enjoy working on personal projects:

idos-dashboard | [Python, Flask, jinja2](#)

github.com/chinese-soup/idos-dashboard

Simple Czech public transport system departures dashboard

zradlo | [Python, Flask](#)

github.com/chinese-soup/zradlo

Small website aggregating menus of restaurants around our office, that I've written for myself and colleagues at my first workplace.

OPEN-SOURCE COLLABORATION

I am also an open-source fan and have contributed or actively contribute to open-source projects on GitHub, some of which include:

Lith | [C++, Qt, QML](#)

github.com/LithApp/Lith

Fast and user-friendly WeeChat relay GUI client for all major desktop and mobile operating systems.

- This project's focus is the iOS platform. Since I'm also an iPhone user and use WeeChat, I am motivated to help with this project by submitting patches with new features and minor bug fixes.
- This project gave me a good outlook on how applications are designed in Qt&QML and also somewhat deepened my understanding of C++ code.

BunnymodXT | [C++](#)

github.com/YaLTeR/BunnymodXT

Cross-platform tool enhancing gameplay with power features for Half-Life based video games.

- The tool works by hooking/modifying memory regions of the game's libraries on-the-fly, therefore adding new features to this project has served me as a good introduction to reverse engineering using Ghidra.

SPOKEN LANGUAGES

Czech: native speaker

English: C1 – able to communicate with ease

German: <A1 – self-taught, started learning in summer 2022

OTHER INFORMATION

Driver's license: B (cars)

Free-time interests: cycling, novels, TV shows, fast typing, nature