
Patrik Kólbl

DevOps / Full Stack Programmer

Tel. 512 512 256

jobs@exploit.cz



ABOUT

I am a 34-year-old web application programmer who started programming html pages in 1999.

In 2006, I launched an Internet cookbook project recepty-online.cz which I run to this day at the address recepty.eu.

In 2007 I started working as a frontend programmer in the largest travel agency in the Czech Republic - Invia.cz where I was responsible for the complete redesign and rewriting applications from legacy code to the Zend Framework.

I am currently working from my office in Ivančice (near Brno/Czech Republic) as a **self-employed** freelance programmer and I am willing to **offer my service** only **at a distance**. We would save each other our precious time without unnecessary commuting to your offices.

DEPLOYMENT - *CI/CD, Kubernetes, AWS, Gitlab, Terraform*

Nowadays I try most things in the development of **automated** via **CI / CD** (Continuous integration / Continuous deployment) using **Gitlab Pipelines** (self-hosted Gitlab CE) and deployment I carry out to Kubernetes, which I manage myself. Cloud Server manages over **Terraform** (Infrastructure as Code).

I use **Webpack** for building versioned CSS (SASS) and JavaScript. I completely rewrote an earlier project using **jQuery** to **Preact**.

I have experience with automatic CI building **Node.js**, **PHP**, **React**, **Vue.js** in Linux **Docker** containers and storing in the private Docker registry, where they are versioned and from where they are then deployed.

I also dealt with CI building **.NET Framework** or **.NET Core** applications using **Windows on AWS**

CodeBuild - Gitlab code goes through CI to AWS **CodeCommit** and from then performs build via AWS Codebuild. Information about the status of the build and the result of tests is continuously written back to the Pipeline log in Gitlab, although the build takes place outside **Gitlab Runner**.

In the past, I also took care of setting up virtual servers, Postgres databases, domains, and managing ssl certificates for https and **CloudFront**, including the deployment of static applications stored on the AWS **S3** storage or deployment **lambda** via **SAM**. Everything was configured through **Terraform**.

In earlier times, before the CI / CD I used to deploy applications using **Capistrano** (versioned Deployment with rollback) with build preprocessor **gulp.js** based **Node.js** components. Here ran the CSS minification and build based on **Bootstrap 3** in **SASS** and minification

javascripts. This experience is useful when migrating your older projects to Docker.

SKILLS

My previous experience mainly includes migration of obsolete PHP code to a suitable open source Framework. Currently, most dealing with their **Dockerization** and their deployment in **Kubernetes** (I run a self managed Kubernetes on **the Hetzner Cloud**). I have experience with **AWS** Cloud too.

I created my own NodeJS app (picture watermarker and resizer) that communicate with main PHP applications through **AMQP** and creates thumbnail images after adding new content. In NodeJS I also programmed several web scrapers communicating with REST API.

I am also interested in, for example, the frontend frameworks React (Next.js, Preact) and Vue.js (Server-Side Rendering, PWA).

I also have experience in writing **Node.js CLI** applications where I programmed data Scrapper portals CEZ, EON and Sunny Portal with output in **JSON** data on the production of solar power.

DATABASES

I work with **MySQL** (MariaDB HA configuration at the three servers in my Kubernetes cloud) or **PostgreSQL** database.

I use **Redis** or **ElasticSearch** . I also have experience with **MongoDB** or **SOLR** . I worked too with the ORACLE database, but only as a part of teaching at fi.muni.cz (FI: PV003). With database layer I have experience with PDO, Nextras \ Orm, Nette \ Database or Doctrine 2.

DEBUGGING

I am used to debug PHP Applications via **IDE debug** + **xdebug** (including Dockerized applications). This saves time and **work more efficiently**.

I also use debugging panels from Symfony or Tracy (suitable for PHP legacy applications to detect fatal errors).

SERVER

I will also deal with the basic administration of a Debian-based Unix server (Ubuntu Server) on level settings http server **Nginx** + PHP-FPM https including configuration and virtual hosts. Today is many things have already been resolved in Kubernetes **Ingress - OpenResty** based on Nginx + LUA). I have previous experience with Apache + PHP as a CGI too. I am actively using and adjusting the **Varnish** proxy.

<https://exploit.cz/my-experience/>

EXPERIENCE

Recepty-online.cz / recepty.eu, remote - Full stack

2006 - PRESENT

- 07/2020 - **Terraform** - [Hetzner DNS](#)
- 06/2020 - **React** + Hooks / Next.js, Apollo, **GraphQL** - WIP
- 06/2020 - **Symfony 5.1**
- 03/2020 - Rewrite dependence on **jQuery** -> **Preact**
- 04/2020 - New [EasyAdmin](#) Administration + custom multi Drag & Drop images uploader
- 02/2020 - **PHP 7.4** - declare(strict_types=1);
- 10/2019 - **Elasticsearch** + [CZ Hunspell](#)
- 08/2019 - **Varnish Cache** with [auto reload when deployment changed](#)
- 04/2019 - Symfony Messenger Queue - **RabbitMQ** - Image resizer + watermarker
- 03/2019 - Symfony Messenger Queue (in BETA) - RabbitMQ - Newsletter sender
- 01/2019 - Bootstrap 4 Redesign - **Sass** / **Webpack**
- 12/2018 - PHP 7.3
- 06/2018 - **Gitlab CI** - Auto DevOps - Kubernetes
- 05/2018 - **Terraform** - **Kubernetes Cluster** - Hetzner Cloud
- 02/2018 - Symfony 4
- 01/2018 - **Redis** as Session Storage + Doctrine Second Level Cache
- 12/2017 - PHP 7.2, **Elasticsearch 6**
- 07/2017 - Gitlab CI - first custom deployment via Rancher v1 API
- 03/2017 - First **Dockerized** version
- 05/2016 - Rewritten to Symfony 3.1

PhotonEnergy.com - External PHP + node.js developer + AWS

2015 - 04/2020

- PHP legacy code maintenance
- Migration of application monitoring to Nette Framework 2.3
- Web data scrappers for ČEZ, EON and SUNNY PORTAL portals with output in JSON
- Gitlab maintenance
- Deployment to **AWS** via **Terraform** , **Lambda** through **SAM**
- **.NET Framework build** + test within **AWS CodeBuild** on the Windows platform

Finance.cz, Brno - Full stack PHP developer Team Leader

2013 - 2015

- Maintenance of internal legacy Framework + migration to Symfony 2 Framework
- Code migration from PHP 5.3 to 5.6
- Database migration from Latin 2 to UTF-8 + INNO DB + Foreign Keys
- Rewrite rules from Apache to NGINX
- Complete settings of the NGINX server, including virtual hosts
- Removed application routing via pre-generated directory structure
- Fix SQL injections and remove 6 different DB layers and merge into 1
- Redesign of the internal content management system to a responsive template based on Bootstrap3.
- Management of 2 junior programmers

Vykupto.cz, Brno - *PHP developer*

2013

- Nette Framework v 0.9 / Portal bug fixes + Code Reviews

Freelancer, Brno - *Work on own projects*

2011 - 2012

- Recepty.eu - PHP Developer - Zend Framework 2 DEV1, Bootstrap 2 template
- Kabat-Fans.cz - PHP Developer - Zend Framework 2, Bootstrap 2

Invia.cz, Brno - *Web development Team Leader*

2007 - 2010

- Migration of the internal legacy Framework to Zend 1 Framework
- Transition from SVN to GIT - Trac (<https://trac.edgewall.org/>)
- Define custom rules for code formatting (similar to PSR-1)
- Removal of include and require in the application and introduction of class autoloading (PSR-0)
- Code and database migration to UTF-8
- Division of a monolithic application consisting of 3 internal applications, a web portal and an affiliate applications on separate components communicating via SOAP
- Internationalization i18n + localization L10n - Invia.pl, Invia.sk, Invia.hu, Invia.ua
- Complete redesign of the website (rewriting of all templates to Smarty.net)
- Managing Code Reviews
- Management of 2 junior programmers

Mir4nda PACK, remote - *Instant messaging based on Miranda IM*

2004 - 2015 - <https://www.facebook.com/Mir4ndaPack/>

Framework migration

- Recepty.eu - Symfony 2.3 - 5.1
- Invia.cz in 2009 to Zend Framework 1.7 to 1.11
- Finance.cz in 2013 to Symfony 2.3 to 2.8 Framework
- Photonenergy.com in 2015 on Nette Framework 2.3
- Kabat-Fans.cz in 2016 at Symfony 3 + PHP7 + Bootstrap based responsive design Cep
- Recepty.eu in 2016 on Symfony 3 + PHP7 + Bootstrap based responsive design

<https://github.com/insekticid/k8s-upgrade>

<https://github.com/insekticid/elasticsearch-hunspell>

<https://github.com/insekticid/docker-piwik>

Contribution work

Symfony patches

<https://github.com/symfony/symfony/pull/25841/files>

<https://github.com/symfony/symfony/pull/22265/files>

<https://github.com/api-platform/core/pull/1037/files>