# Patrik Kőlbl

# DevOps / Full Stack Programmer

Tel. 512 512 256
job@exploit.cz
http://github.com/insekticid
https://exploit.cz/my-experience/



# **ABOUT**

I am a 34 year old web application programmer. I started in 1999 as an HTML programmer.

In 2006, I launched my main project Recepty-online.cz known as Recepy.eu (PHP 4 platform).

In 2007 I started working as a frontend programmer in the largest travel agency in the Czech Republic - <a href="Invia.cz">Invia.cz</a> 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.

#### **SKILLS**

PHP 3, 4, 5, 7, 8	CSS	JS	Other
Zend Framework 1	Bootstrap 2, 3, 4	Node.js 9+	Kubernetes 1.10+
Symfony Framework 2,3,4,5	Tailwind 1.9	PREACT 8, 10 VUE.JS 2	Terraform, Mysql, MariaDB, PostgreSQL
Nette 2	SASS/LESS	jQuery 1,2,3	AWS Cloud/Hetzner
RabbitMQ, Redis, ElasticSearch, Varnish		Webpack/Symfony Encore	Gitlab, CI/CD, Docker

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 Scraper portals CEZ, EON and Sunny Portal with output in **JSON** data on the production of solar power.

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

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 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 **Iambda** 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.

## **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.

#### **EXPERIENCE**

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

#### 2006 - PRESENT

- → 01/2021 Multi Language application Recepty.eu CZ, Koche.eu DE WIP
- → 12/2020 Symfony 5.2 + PHP 8.0
- → 09/2020 Tailwind CSS Framework 1.9 WIP
- → 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 scrapers 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 - PULL REQUESTS**

- <u>Unable to bind listening socket for address '/var/run/php/php-fpm.sock by insekticid · Pull Request #1766 · api-platform/api-platform · GitHub</u>
- [DoctrineBridge] Fix bug when indexBy is meta key in PropertyInfo\DoctrineExtractor by insekticid
   Pull Request #25841 symfony/symfony GitHub
- Allow Upper Case property names by insekticid · Pull Request #22265 · symfony/symfony · GitHub
- Allow Upper Case property names by insekticid · Pull Request #1037 · api-platform/core · GitHub