



Kryštof Šplíchal

Senior Backend Software Engineer

Profile

Experienced back-end engineer specializing in building robust services and data processing pipelines. I built a solution for scraping all major audiovisual platforms, including reverse engineering anti-bot measures like Google's ReCaptcha. I put a lot of effort in writing clean, tested and maintainable code.

Employment History

Senior Software engineer II at Pex, Full Remote with overlap to US hours

August 2021 — Present

I design, implement and own various high-impact components and products. My main focus are pipelines that process large amounts of data, small and efficient services, reliable and scalable APIs. I work with a team of great people and regularly support them.

Other activities:

- Based on thorough analysis of DB interactions of our numerous backend microservices, I architected and implemented a layer of Data Access Services and synchronized models, which now serve as a backbone of all database access across the whole product.
- Pushed for an engineering-wide RFC process.

Senior Software Engineer at Pex, Prague / Remote

August 2019 — September 2021

Design, implementation and optimization of web crawlers, metadata extractors, proxies, captcha solvers. (Golang, Typescript)

- These components download content and metadata from all publicly available videos/tracks on tens of major platforms like Youtube, Facebook, Instagram, Twitter, TikTok, ...
- Typical rate of ~150 million new/updated rows per day requires high scalability and reliability of each component.
- Sites often change their layouts, APIs and defense mechanisms - I was constantly looking for new ways of obtaining the data.

Other interesting projects:

- High-scale orchestration of data processing using Cadence.
- Site-wide search implementation using Elasticsearch with development of a custom pipeline that handles synchronization by denormalizing data from a Postgres database.

Senior Software Engineer at GoodData, Prague

September 2018 — July 2019

I co-designed and developed an application aimed at simplification of an ETL pipeline setup (Full-stack, mostly back-end - Typescript, Node.js, GraphQL, React).

Details

Prague

Czech Republic

krystofspl@gmail.com

Links

[Linkedin](#)

[GitHub](#)

Skills

Go / Golang

Ruby

Microservices

Data scraping

API design

Data pipelines, warehouses

SQL

PostgreSQL

Uber Cadence

Elasticsearch

TypeScript

Javascript

Reverse Engineering (web)

Java

Hobbies

I love music - listening, composing, playing in bands
Reading and learning

Trekking, biking, weight lifting

Home automation

Gaming

Continued optimizations and refactoring of ETL API and DB connectors and their infrastructure (jRuby, Java).

Implementation of specific data processing and transformation tools for customers.

Software Engineer at GoodData, Prague

August 2017 — September 2018

I designed and developed numerous API and DB connectors for GoodData's ETL infrastructure and internal tools for data validation and synchronization. I worked in a small team, where I quickly took full ownership of impactful components.

Software Engineer at Easy Software, Prague

July 2015 — February 2016

Implementation of Redmine plugins with focus on Invoicing. I worked here during the last year of my studies.

❖ Education

Master's degree, Czech Technical University of Prague, Prague

2015 — 2017

Faculty of informatics - Software and web engineering

Built an application for tracking relationships in a music collection

Bachelor's Degree, Czech Technical University of Prague, Prague

2012 — 2015

Open Informatics - Software engineering