

Vít Brunner

Software engineer with attention to detail. Started as a full stack developer, specialised in backend. Interested in functional programming.

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WORK EXPERIENCE

Elastic — Senior Cloud Engineer

OCTOBER 2018 - MARCH 2022, Fully distributed company

Worked on [Elastic Cloud](#), focusing on the backend powering the user journey. Created APIs to make the frontend engineers' lives easier, added the ability to customise user trials, worked on integrating various third party services, added health monitoring for several internal services.

The technology stack was a mix of Scala and Python, backed by PostgreSQL and Elasticsearch.

Swarms Technologies — Backend Engineer

DECEMBER 2016 - DECEMBER 2017, Bielefeld, Germany (working remotely)

Participated in architecting and building the RESTful API backing the Swarms' mobile app for workers and the admin interface for job providers. Built in Scala, using the Play Framework with Slick, Akka, and Cats, backed by PostgreSQL.

Introduced integration tests for the major user journeys, significantly reducing the number of regressions. Migrated the backend to Docker, leading to a unified and predictable development environment and a speed up in continuous integration. Created a simple [Python SDK](#) for the API. Suggested several cost-optimization strategies for AWS.

Inviqa — Software Engineer

SEPTEMBER 2012 - DECEMBER 2016, Sheffield, United Kingdom (remote since 2014)

Helped create a Docker-based continuous delivery pipeline. Built a service to monitor the health of Kubernetes clusters using Scala and Akka HTTP.

Co-implemented a REST API to facilitate and process donations for a large non-profit organisation. Prototyped a hyperlocal news application powered by Elasticsearch with an AngularJS frontend. Moved a large MySQL database to a different data centre with zero downtime.

Perfect World — PHP Developer

JANUARY 2010 - MARCH 2012, Amsterdam, Netherlands

Created an i18n system to cater to the specific needs of the company. Created reporting tools for the finance department to facilitate business decisions. Conducted technical interviews of developer candidates.

A-WebSys — Software Developer

NOVEMBER 2007 - FEBRUARY 2009, Brno, Czech Republic

Developed and maintained a wide variety of small to medium sized web apps in small teams. Built a simple points-based eshop in an afternoon.

TECH I LOVE A LOT <3 <3 <3

Elm (for simplicity and helpful error messages)

Idris (dependent types, totality, better standard library than Haskell)

Git (elegant core: blob, tree, commit, pointer)

Scheme Lisp (the pinnacle of simplicity)

TECH I LIKE

Scala (Play, Slick, Akka, Cats)

PostgreSQL

Linux (Ubuntu, Debian, NixOS one day)

Docker (Kubernetes)

HTTP, REST

TECH I USED A FAIR BIT

Python (Keras, Django, Pandas, Jupyter Notebook)

PHP (Symfony, WordPress)

MySQL

JavaScript (jQuery, Angular)

HTML, CSS

LANGUAGES

I speak Czech natively, English and Polish fluently, dabble in German and French.

PERSONAL PROJECTS

Sniper — *Elm*

An interface for watching soon-ending [Handshake](#) name auctions. Created a [Punocode decoder library](#) in the process.

Minotaur — *Scala, Jupyter, Pandas, Keras*

A Monte Carlo tree search AI to play [Quoridor](#). I can beat it.

Training a [neural network](#) learning from 200,000+ game records. Currently at 50%+ accuracy of estimating the next move of the test set.

Side By Side — *AngularJS, CoffeeScript*

Easy visual comparison tool for different translations or versions of itemised texts; e.g. poems, bibles, etc. See it in action for [Enchiridion](#) and [Tao Te Ching](#).

Zlej Rob — *Python*

Evolutionary algorithm AI solver for [RoboZZle](#). Solved 3,000+ puzzles. Currently in the top 30 of the 200,000+ players. This was lots of fun.

Masonry Ordered — *JavaScript, jQuery*

A jQuery plugin to keep elements in jQuery Masonry ordered. This solved a problem I turned out not to have, but some people still use it.

Tsumego Collections — *TeX, Perl, Bash*

Created PDFs containing go problems gathered from various sources. A couple of years later, designed a website powered by Middleman and Twitter Bootstrap. A small mistake!

COOL THINGS I'VE ACHIEVED

Been organising [Polish Summer Go Camp](#), 2010, and every year since 2016. Introduced many improvements: split study groups by student skill, better tournament structure, play currency to bid for prizes.

Reached [4 dan in the game of go](#), studied in South Korea for three months under the kind guidance of Mr Kim Sung-Rae, 8 dan professional.

Cycled across Europe, [following the Eurovelo 6](#) for two months, from the Atlantic to the Black Sea.

Translated [KGS](#) and its client software from English into Czech.

Successfully completed several online courses; one of the first MOOCs – the AI-Class by Sebastian Thrun and Peter Norvig, How Things Work by Louis A. Bloomfield, Beginner's Guide to Irrational Behaviour by Dan Ariely, A Brief History of Humankind by Yuval Noah Harari, Machine Learning by Andrew Ng. Started and haven't finished many more.

FAVOURITE FOOD & DRINK

Tea: green, oolong, pu-erh

Very dark chocolate

Strongly hopped ale

Indian cuisine

SPORTS

Cycling (no matter the wind, rain, snow, and ice)

Walking (especially while listening to a good podcast)

Running

Ice skating

Skiing (both cross-country & downhill)

OTHER ACTIVITIES I ENJOY

Playing board games

Getting locked in escape rooms

Baking bread and strudel