



Backend engineer with 6 years of experience passionate about experimentation and clean solutions. I work closely with product stakeholders to ensure alignment with user needs, and try to learn as much as possible from every member of a team I interact with. I am most interested in roles where I can build on my technical leadership, and work on distributed, data-intensive cloud-native systems.



Experience

Curation Corporation – Senior backend engineer

London – 6/2021 – present

- development of internal tools supporting ESG experts in synthesising business intelligence from a wide variety of news sources
- implemented new features for creating automated email briefings which reduced the time taken to create briefings by 84% compared to previous non-integrated workflows
- maintenance and tuning of data pipelines which process 3 million articles a day and push them to different search indices
- deployment of NLP models as FastAPI services for purposes of abstractive summarisation and entity extraction
- implemented several DX improvements:
 - added typescript, increased modularity and inversion of control
 - increased test-coverage and added backend test-suites to CI pipelines
 - utilities for repeatable fully-seeded test deployments
 - optimisation and parallelisation of CI/CD pipelines which improved confidence in delivery, code quality and cadence

Birdie – Full-stack developer

London – 11/2019 – 2/2021

- development of various frontend and backend components of Birdie's elderly care software ecosystem
- improved performance of backend services by adding permissions-caching layers
- helped improve system consistency by implementing utilities for optimistic concurrency control

Vectary – 3D developer

Bratislava – 06/2019 – 10/2019

- refactoring and development of Vectary's 3D-modelling engine (typescript and THREE.js)
- making detailed optimisations for browser performance through extensive use of the v8 profiler
- developing robust importer/exporter tools for proprietary 3D file formats

Subdigital – software developer

Bratislava – 08/2018 – 06/2019

- design and development of hardware & software components of digitally-enhanced architectural models and installations
- building prototypes that helped Subdigital develop new clients
- mathematical modelling to optimise custom tools in Grasshopper for Rhino

Lab.SNG – software developer

Bratislava – 01/2018 – 06/2019

- development of the web-umenia search API for the archives of the Slovak National Gallery
- introduced Docker to team workflow

Kiwi.com – Junior Python Developer

Bratislava – 11/2016 – 12/2017

- development of internal HR software using Django

Education

Institute of Sonology, Koninklijk Conservatorium

MMus

Den Haag – 2014 – 2016

- studied music computing, design and development of software synthesis and music performance systems, history and theory of algorithmic music and sound studies
- gave many concerts of my own music, often using self-built tools

One Year Cursus

Den Haag – 2013 – 2014

- music technology and programming for music

Imperial College – B.Sc Math

London – 2007 – 2010

- specialising in Topology but also studied Linear Algebra and Computational Methods

Skills

High Fluency

- Typescript, Node.js, NestJS
- Python, FastApi
- graphql
- PostgreSQL, SQL Server
- kubernetes, Docker
- Elasticsearch
- React

Intermediate Fluency

- AWS
- Flask, numpy
- HTML, CSS

Side Interests

- SuperCollider, Max/MSP, audio programming
- Rust, Go

Selected Projects

- constraint problem solver gui (Octeract, London – 2/2021 – 6/2021)
- python environments which offer interactive solving of MINLP problems
- browser development environment and REPL communicating with python environments over websockets
- Supercollider tools
- project framework for algorithmic composition
- missing import statement
- gui event sequencer
- Múzeum Slovenských národných rád, Myjava – 03/2019 Audio installation with ultrasonic distance sensors and arduino microcontrollers
- Keys, Trauma Bar und Kino, Berlin – 02/2019 Live-coding music performance at algorave
- Pohoda Klub stage, Trenčín – 06/2018 Live music performance at a major Slovak music festival