







Hi, I'm Josh - a full-stack developer living in Berlin (originally from Canberra, Australia). I've worked as a developer for almost 10 years, with a broad range of experience from web development and native apps, to backend and system languages like C++ and Go. I'm also a long-time linux and open-source enthusiast.

Employment

flowkey GmbH

React Meteor

Meteor Type

TypeScript

GraphQL

MongoDB

2019 - 2020

I worked briefly at flowkey GmbH, completing several projects for their piano learning web-app such as the implementation of their 'Netflix' style redesign and a specialized layout algorithm for musical note name internationalization. A variety of tools and technologies were covered, such as GraphQL/Apollo, React, MongoDB, Swift and Android debugging.

KIWI.KI GmbH

Kubernetes

PostgreSQL

Backbone

Pythor

2016 - 2018

One of my tasks at KIWI was developing an overhauled version of their web-based portal for housing companies, covering back-end work (Python, Flask), database refactoring (PostgreSQL), front-end design and implementation (ES6 Javascript, Backbone, Foundation CSS), build system re-tooling (NodeJS, Gulp), and deployment (Kubernetes).

My work at KIWI was often truly full-stack, with tasks requiring me to flash hardware to test new firmware, delve into dense SQL queries, all the way up to UI-design and user-experience considerations; even some graphic-design.

General Dynamics Mediaware



MPEG

Boost

Python

Twisted

2012 - 2015

At Mediaware I worked on high-performance video processing for broadcast television. It was a unique challenge to meet hard real-time requirements for lossless MPEG transformations. I was engaged in C++ performance analysis, debugging and feature development on a large codebase. It was a mid-sized Agile team adhering to well-defined processes for issue-tracking, continuous integration, customer feedback and development iterations.

Later I took on a new role as primary web developer after showing initiative by producing browser-based performance analysis tooling. Went on to develop a company-wide framework for service control utilizing websocket-based RPC (WAMP) and reactor-based networking (Twisted). Was also responsible for UI design, mockups, user-testing and producing high-quality documentation.

NCH Software



Win32

At NCH I was responsible for creating several native desktop applications from scratch, including a non-destructive photo editor and musical notation software. Initial concept, design, mockups, prototyping, development and release was handled either solo or in small teams. Highlights:

- Designed a unique modeless editing UI for sheet music.
- Implemented a dynamic level-of-detail system for smoothly scaling fast fourier transform visualizations.
- Developed a high-performance non-destructive image transformation and layering system.

Education

Academy of Interactive Entertainment

 Ξ ୍ଲେ Advanced Diploma of Professional Game Development



Covered a broad range of computer science and visual design topics, including:

- Realtime games programming in C++ (Visual Studio)
- · Composition, layout and prototyping
- 3D content creation and animation (3dsMax)
- Use of realtime graphics engines (Unreal)

Deutsche Akademie für Sprachen

Taking advantage of a language-learning visa, I studied German full-time to help with my goal of achieving permanent residency in Germany. I continued until B1 level.

Other skills/interests

Linux

I'm a long-time open-source enthusiast, and my development environment is entirely Linux and open-source based.

Computer Graphics

I originally studied real-time graphics programming, which continues to influence my coding style and emphasis on efficiency.

2009 - 2012

Go

I'm a fan of Golang and its principles, and would be excited to use it more thoroughly in a professional context.