

**Herman Bergwerf**

hbergwerf.nl

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## Experience

### **Freelance Developer**

Bergwerf Labs

2023 – Present

On Location & Remote

### **Backend Engineer**

Omoda

Mar 2022 – Jul 2022

Remote

Responsible for researching novel machine learning techniques and implementing an image processing codebase in Python. We developed a fully automated pipeline for editing, cropping, and selecting photos from the photography studio of Omoda.

### **Software Engineer**

CreativeQuantum

Aug 2017 – Dec 2021

Berlin, Germany

Lead designer and developer of a new, web-based chemical sketching program for the *webChem* platform. Using the Dart language I designed a modular event handling system and a top-notch rendering mechanism for chemical structures.

### **Full Stack Developer**

Learnbeat

Jan 2017 – Jun 2018

Leiden, Netherlands

I was asked to implement a chemical sketching program based on MolView.org in *Learnbeat*, which is used for digital education by over 500 highschools in the Netherlands.

### **Software Engineer**

Profects

Aug 2014 – Dec 2016

Kapelle, Netherlands

At Profects I helped to develop a microservice architecture for new projects based on Docker and Golang. One of our projects involved an email scheduler that sends thousands of customized pricelists to customers of *Adri&Zoon* to this day.

## Education

### **Radboud University**

MSc. *Mathematical Foundations of Computer Science*

2019 – 2023

MFoCS follows a long-standing research tradition at RU in logical and mathematical foundations of computing science.

*Thesis: An Exploration of Graph Pebbling.*

### **Delft University of Technology**

BSc. *Nanobiology*

2015 – 2019

Nanobiology is the study of the complexity of living systems. It employs the methods and principles of Physics to do this in a quantitative way.

*Thesis: Nerve fiber tracing in brightfield images of human skin using deep learning.*

## Skills

Technical Documentation

Visual Communication

UI/UX Design

Formal Methods

Agile Development

DevOps & Cloud APIs

Database & Systems Design

3D Graphics & GPU Acceleration

### **Programming**

JavaScript/TypeScript (experienced)

Python (experienced)

C/C++ (experienced)

Dart (experienced)

Go (intermediate)

Java (intermediate)

Julia (intermediate)

PHP (intermediate)

OCaml (intermediate)