

 $\label{eq:convergence} Cloud \ Technologies \cdot Teaching \cdot Artificial \ Intelligence \\ royvoetman@outlook.com \cdot royvoetman.nl \cdot github.com/RoyVoetman$ 

#### EXPERIENCE

### **Cloud Solutions Engineer**

Jul 2023 | Present

 $RDW \cdot Apprenticeship$ 

- Developer for the Tol Collection System.
- A committed member of the Cloud Architecture Board.
- Developer for the Cloud Integration Platform.
- Skills: Machine Learning, Qiskit, Scikit-Learn, Azure Functions, Python

# Software Engineer

Feb 2022 | Jul 2022

 $CGI \cdot Internship$ 

- Conducted research on practical applications of quantum computing for business.
- Developed a PoC for executing and comparing traditional and quantum ML algorithms.
- Skills: Machine Learning, Qiskit, Scikit-Learn, Azure Functions, Python

### Software Engineer

Feb 2021 | Jul 2021

 $Self\ Driving\ Challenge\cdot\ Internship$ 

- Led a team of 5 engineers in developing self-driving software for autonomous vehicle control.
- Implemented a codebase redesign for improved maintainability and portability.
- Skills: C++, NVIDIA Drive, Carla Simulator, PID Controllers

## Back-end Developer

Mar 2018 | Feb 2021

 $Noardcode \cdot Part-time$ 

- Developed back-ends for various clients, translating customer requirements into code.
- Skills: Laravel, PHP, PHPUnit, MariaDB, JS, jQuery, Redis

# Web Developer Learn and Believe · Freelance

Oct 2017 | Dec 2019

- Developed single page applications ensuring that clients' visions and requirements were met.
- Skills: JS, Vue, JWT, REST APIs

## PHP Developer

Sep 2016 | Jul 2017

 $OSG\ Piter\ Jelles\cdot\ Internship$ 

- Engineered a web-based voting system for co-control board elections.
- Skills: PHP, MSSQL, JS, JQuery

#### EDUCATION

# MSc, Computer Vision & Data Science

2022 | 2023

NHL Stenden University of Applied Sciences

Graduated Cum Laude

## BSc, Software Engineering

2018 | 2022

Hanze University of Applied Sciences Groningen

GPA: 4.0 of 4.0 (US scale), Average grade: 8.9 (EU scale)

#### **MBO 4 Application Development**

2015 | 2018

Friesland College

#### CERTIFICATIONS

Architecture, Algorithms, and Protocols of a Quantum Computer TU Delft | edX

https://courses.edx.org/certificates/8d08b530ca03441c9a5bfdc7df039c13

May 2022

Machine Learning Stanford | Coursera

https://www.coursera.org/account/accomplishments/verify/A8WTKWR2MKY8

May 2022

VWO Wiskunde B (Mathematics for the hard sciences) Utrecht University | Boswell-Bèta

https://www.royvoetman.nl/credentials/wiskunde-b.pdf

Aug 2021

Computer Science for Artificial Intelligence Harvard | edX

https://credentials.edx.org/credentials/b251ddf835104f99ab00a67918f55d04/

Sep 2020

Certified Laravel Developer

Laravel

https://exam.laravelcert.com/is/roy-voetman/certified-since/2020-02-11

Feb 2020

### SKILLS

PHP, JavaScript, C, C#, Java, Python, SQL Programming Languages:

Software Documentation, Agile Methodologies, Design Patterns & Principles Industry Knowledge:

Interpersonal Skills: Public Speaking, Team Leadership, Time Management

Dutch (Native proficiency), English (Full professional proficiency) Languages:

### Ancillary Positions

# **Educational Content Creator**

Aug 2021 | Present

Open Source CS

- Creating mathematically orientated explainers tailored for computer science students. https://www.youtube.com/OpenSourceCS

**Guest Lecturer** Jun 2022 | Jun 2022

Noorderpoort

Instructed an intensive two week study program on working with PHP and Laravel.

Teaching Assistant

Sep 2019 | Feb 2022

Hanze University of Applied Sciences Groningen

- Hosted labs, recitation hours, and graded problem sets.

## Study Support Instructor

Nov 2019 | Feb 2022

Study Association RealTime

- Hosted exam preparation sessions for all programming related first-year courses.

#### Publications

Using Diffusion Models for Dataset Generation:

The Big Data Myth: Using Diffusion Models for

Springer Sep 2023

Prompt Engineering vs. Fine-tuning Roy Voetman, Alexander van Meekeren, Maya Aghaei, and Klaas Dijkstra

 $\mathrm{doi:} 10.1007/978\text{-}3\text{-}031\text{-}44237\text{-}7\_14$ 

arXiv

Dataset Generation to Train Deep Models Roy Voetman, Maya Aghaei, and Klaas Dijkstra

Jun 2023

Identification of Potato Virus Y in Potato Plants

arXiv:2306.09762

using Deep Learning and GradCAM Verification

NHL Stenden Mar 2023

www.cvds-nhlstenden.com

Roy Voetman, Willem Dijkstra, Jeroen E. Wolters, and Klaas Dijkstra

#### Projects

## GitLab API Client for PHP

Open Source Library

https://github.com/RoyVoetman/flysystem-gitlab-storage

A PHP package that has **over 10.000** downloads on GitHub.