



ROY VOETMAN

Cloud Technologies · Teaching · Artificial Intelligence
royvoetman@outlook.com · cs-library.com · github.com/RoyVoetman

EXPERIENCE

Cloud Solutions Engineer

Jul 2023 | Present

RDW · Full-time

- Developer for the Tol Collection System.
- A committed member of the Cloud Architecture Board.
- Developer for the Cloud Integration Platform.
- Skills: C#, OAuth, Durable Functions, Visio, TSQL

Software Engineer

Feb 2022 | Jul 2022

CGI · 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 · 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 · Part-time

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

Web Developer

Oct 2017 | Dec 2019

Learn and Believe · Freelance

- 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 · 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 https://courses.edx.org/certificates/8d08b530ca03441c9a5bfdc7df039c13	TU Delft edX May 2022
Machine Learning https://www.coursera.org/account/accomplishments/verify/A8WTKWR2MKY8	Stanford Coursera May 2022
VWO Wiskunde B (Mathematics for the hard sciences) https://www.cs-library.com/credentials/wiskunde-b.pdf	Utrecht University Boswell-Bèta Aug 2021
Computer Science for Artificial Intelligence https://credentials.edx.org/credentials/b251ddf835104f99ab00a67918f55d04/	Harvard edX Sep 2020
Certified Laravel Developer https://cs-library.com/laravel-certificate.pdf	Laravel Feb 2020

SKILLS

Programming Languages:	C#, JavaScript, C, PHP, Java, Python, SQL
Industry Knowledge:	Software Documentation, Agile Methodologies, Design Patterns & Principles
Interpersonal Skills:	Public Speaking, Team Leadership, Time Management
Languages:	Dutch (<i>Native proficiency</i>), English (<i>Full professional proficiency</i>)

ANCILLARY POSITIONS

Educational Content Creator <i>CS Library</i>	Aug 2021 Present
– Creating mathematically orientated explainers tailored for computer science students. https://www.youtube.com/@CS-Library	
Guest Lecturer <i>Noorderpoort</i>	Jun 2022 Jun 2022
– Instructed an intensive two week study program on working with PHP and Laravel.	
Teaching Assistant <i>Hanze University of Applied Sciences Groningen</i>	Sep 2019 Feb 2022
– Hosted labs, recitation hours, and graded problem sets.	
Study Support Instructor <i>Study Association RealTime</i>	Nov 2019 Feb 2022
– Hosted exam preparation sessions for all programming related first-year courses.	

PUBLICATIONS

Using Diffusion Models for Dataset Generation: Prompt Engineering vs. Fine-tuning Roy Voetman, Alexander van Meekeren, Maya Aghaei, and Klaas Dijkstra	Springer Sep 2023 doi:10.1007/978-3-031-44237-7_14
The Big Data Myth: Using Diffusion Models for Dataset Generation to Train Deep Models Roy Voetman, Maya Aghaei, and Klaas Dijkstra	arXiv Jun 2023 arXiv:2306.09762
Identification of Potato Virus Y in Potato Plants using Deep Learning and GradCAM Verification Roy Voetman, Willem Dijkstra, Jeroen E. Wolters, and Klaas Dijkstra	Springer Mar 2023 doi:10.1007/978-3-031-47724-9_16
The practical prospects of quantum computing for enterprises Jordi Mellema and Roy Voetman https://bits-chips.nl/article/the-practical-prospects-of-quantum-computing-for-enterprises/	Bits & Chips Oct 2022