

Adriaan Knapen

Software Engineer and Cloud Specialist

Profile

A highly skilled and motivated Software Engineer and DevOps Consultant with a strong background in cloud computing, full-stack development, and containerization. Experienced in developing and implementing efficient CI/CD pipelines, automating deployments, and promoting DevOps best practices. A strong proponent of automation, GitOps, cloud-native, and LEAN software development. Passionate about contributing to open source projects and engaging with the tech community through public speaking and hackathons.

Areas of Expertise

Cloud Computing - Full-Stack Development - DevOps - CI/CD - Security - Containers - Kubernetes - Azure - Digital Twin Technology - Chaos Engineering - Distributed Systems - Public Speaking - Open Source Contribution

Professional Experience

Senior DevOps Consultant, Eficode

Helsinki, Finland 06/2019 - present

- Public speaking at various tech events, sharing insights on cloud technologies, CI/CD, and the integration of AI in software development.
 - To The Cloud and Beyond: "How to deploy Next.js"
 - The DevOps Conference 2023: "Oursource Your Continuous Delivery Pipeline by Deploying Straight From Source"
 - GitHub Galaxy: "The Secret to Writing High-Quality Code"
 - DevOps Finland August meetup: "Empowering Software Developers With Al-Based Coding Assistants"
 - Developer x AI (2024) by Microsoft: "Experiences from onboarding GitHub Copilot"
- Contributed to the development and implementation of cutting-edge DevOps practices, significantly enhancing deployment efficiency and system reliability for clients.
- Lead-developer at Eficode's <u>reference customer</u> Puro.earth, instrumental in building a team following the best practices of modern software development and leveraging a fully automated cloud-native and GitOps delivery strategy.

Founder & CTO, ClaimR B.V.

Den Bosch, Netherlands 01/2021 - present

- Core architect of the <u>Unveiler</u> location-verification Software-as-a-Service platform for mobile devices.
- Leading the development of the ClaimR Auth Android application.

Research Assistant, Aalto University

Espoo, Finland 01/2019 - 12/2019

- Created a street lighting digital twin for the EIT Digital Activity "Get Home Safely".
- Worked on digital twin projects, including safety and risk management prototypes for high-pressure vessels and a case study of sauna comfort and safety.

Freelancer, Wageningen University

Wageningen, The Netherlands 06/2018 - 09/2018

• Designed, developed and hosted the e-conference platform <u>Foodathon Solutions Market</u> for the SGD Conference.

Junior Software Developer, triptic

Eindhoven, The Netherlands *12/2016 - 07/2018*

Education

Master in Cloud Computing & Services, KTH Royal Institute of Technology
Aalto University

Stockholm, Sweden 2019-2020 Espoo, Finland 2018-2019

- Double degree master from EIT Digital Master School.
- Completed his <u>thesis</u> on chaos engineering, focusing on container-based deployments. Graded 5/5.
- Achieved a GPA of 4.67/5.
- Minor in Innovation & Entrepreneurship.

EIT Digital Summer School: Machine Learning for Financial Data, *ELTE* Budapest, Hungary *Jul 2019*

Bachelor Software Science, Eindhoven University of Technology

Eindhoven, The Netherlands 2015-2018

Attained the bachelor's degree Cum Laude.

Summer School International, Peking University

Beijing, China Jul 2017

Skills

- Cloud Platforms: Azure**, AWS*, GCP*, Heroku*, Vercel*
- DevOps Tools: Kubernetes**, Terraform*, Pulumi*, GitHub Actions*, GitLab Cl*, Jenkins
- Programming: TypeScript*, Bash*, RobotFramework*, Python*, Java, PHP**, Go, Scala, C, R
- Web Development: React**, Next.js**, Nest.js**, Django*, REST**, OpenAPI**, GraphQL*
- Databases: PostgreSQL**, Redis*, MySQL, MongoDB*, FaunaDB*, Prisma**
- Other: Git**, Turborepo*, LaTeX, Serverless Architecture*, Digital Twin Technologies, Unity*
 - */** Indicates more than 100 / 1000 hours of experience on production systems since January 2023.
 - */** Indicates more than 100 / 1000 hours of experience on production systems anytime.

Languages

Dutch [Native]

English [Fluent]

Extracurricular Activity

- Participated in hackathons, including Junction (2018: 1^{st} in challenge, 2019, and 2020), RAW.Galileo.London (1^{st} in track), Open BIM DeepHack (1^{st}), Galileo Innovation Challenge (2^{nd} in track), IoThon (2^{nd} in track), and FireHack.
- Various professionally relevant certifications:

Azure Network Engineer Associate (AZ-700)

Microsoft Jan 2023

GitHub Actions

GitHub Jun 2022

Certified Associate Cloud Engineer

Google Cloud May 2021

- Certified SAFe 5 Agilist

Scaled Agile Inc Feb 2021

- GitLab Certified Services Engineer Professional

GitLab Nov 2020

• Contributed to open source projects, including personal projects like continuous delivery pipelines for this CV.

Publications

- Chaos Engineering for Containerized Applications with Multi-Version Deployments [KTH, Aalto University]
- A Digital Twin for Safety and Risk Management: A Prototype for a Hydrogen High-Pressure Vessel [Springer]
- Digital Twin for Safety and Comfort: A Case Study of Sauna [IEEE Xplore]

The source of this document is <u>source-available</u> and is a derivative work based on a template designed by Yousef, available under the <u>Creative Commons CC BY 4.0 License</u>. Modifications from the original source were made for the purposes of this document.