

With over 15 years of industry experience, I use my knowledge of software to solve business needs. My primary interests lean towards infrastructure and complex systems, but I've typically worked across the full stack and complete software delivery lifecycle throughout my career.

## Experience

Staff Software Engineer

Jan 2024 - Present

[Castor](#) · Amsterdam, Netherlands

Having lead Castor's platform team for about 5 years I've now transitioned to a Staff Engineer role. After spending a year on a greenfield project in Rust to work on our next-gen data capture system, my current focus now is on shifting our applications away from RPC APIs in favor of Event Streaming for inter-service communication and data pipelines.

- Built a Rust and [WebAssembly](#)-based runtime/interpreter to render complex patient surveys on low-end devices such as tablets and phones, allowing a fully offline data-entry experience.
- Delivered a sandboxed (through WebAssembly and [WASI](#)) JavaScript evaluation backend to allow user-uploaded scripts to be executed in a secure, fully isolated environment (required for a legacy system).

Engineering Team Lead - Platform

Apr 2021 - Jan 2024

[Castor](#) · Amsterdam, Netherlands

Since joining in early 2019, I've been building out Castor's ability to run services internally, forming the platform team that we have today. During this time I've switched back and forth between the management and IC tracks depending on the needs of the team and the organization.

- Created in-house database tooling for a cloud migration of 45.000 on-prem MySQL databases ("[schemas](#)") into new MySQL instances on Azure with under 1 minute of unavailability per tenant (P99).
- Launched new Kubernetes-based deployment model to replace our Virtual Machine platform, providing greater ease-of-use for users with a 5x reduction in infrastructure cost.
- Reduced MySQL crash recovery time from over 10 hours to under 10 minutes by working with Microsoft to identify pathological code paths in Azure MySQL Flexible Server.
- Implemented [Earthly](#) to set up automated, reproducible builds of in-house Ubuntu software packages.
- Fostered a team culture with a high degree of [Psychological safety](#), placing a strong emphasis on transparency and quality documentation, a reduction of [Toil](#) through automation, and continuous learning through practices such as pre-mortems, [After Action Reviews](#) and [Post-incident reviews](#).

Chief Information Security Officer

Oct 2019 - Sep 2021

[Castor](#) · Amsterdam, Netherlands

While I joined Castor primarily for DevOps/SRE work, I also acted as the CISO until we had grown large enough to hire somebody for this position full-time. To this day I continue to serve as a backup to our CISO, should he be unavailable.

- Scaled security and compliance processes while growing from 40 to 100 employees across the EU and US.
- Supported the successful recertification audit of [ISO 9001](#), [ISO 27001](#) and [NEN 7510](#).
- Coordinated response to security incidents, including investigation, remediation and communications.
- Ensured Castor would meet the security requirements of major clients, including the World Health Organization (WHO) for their [SOLIDARITY trial](#) on COVID-19 treatments.

Site Reliability Engineer

Feb 2019 - Apr 2021

[Castor](#) · Amsterdam, Netherlands

I joined Castor as the first and sole DevOps/SRE employee and helped shape the infrastructure and platform roadmap throughout their [Series A investment](#).

- Reduced 80% of [Toil](#) by introducing Infrastructure as Code principles using [Ansible](#) and [Terraform](#).
- Helped set executive strategy to move away from local managed hosting providers, standardizing on [Microsoft Azure](#)'s cloud services.
- Launched a dedicated server offering ("[Castor Private Cloud](#)") on Azure.
- Performed a cross-region migration/split of Castor's entire user database, utilizing automation to minimize downtime and provide strong operational guarantees around preventing manual errors.
- Opened up [a new EDC region in Australia](#) (also on Azure).

## Skills

Languages

Kubernetes

- |        |         |
|--------|---------|
| Rust   | AKS     |
| Golang | ArgoCD  |
| Python | Linkerd |
| Elixir | Kyverno |
| Shell  | KEDA    |

Concepts

Monitoring

- |                              |                 |
|------------------------------|-----------------|
| DevOps                       | Prometheus      |
| Site Reliability Engineering | Grafana         |
| Incident Response Management | VictoriaMetrics |
|                              | OpenTelemetry   |
|                              | Datadog         |

CI/CD

Public cloud

- |                   |       |
|-------------------|-------|
| Chaos Engineering | AWS   |
| Event Streaming   | GCP   |
|                   | Azure |

## Technologies

- Kubernetes
- WebAssembly
- Serverless
- Docker
- Ansible
- Terraform
- MySQL
- NATS

## Testimonials

Matthijs Verkaaik

*"Nick is highly structured in his approach to projects, consistently ensuring that tasks are well-defined, timelines are met, and objectives align with broader team goals. His planning and attention to detail greatly contributed to the success of our projects. Beyond his organizational prowess, Nick excelled as a mentor. He readily shared his knowledge and expertise, creating an environment where team members felt supported and empowered to grow in their roles. His guidance was crucial in my professional development, and I am grateful for the insights and skills I gained under his leadership."*

## Senior Developer & InfoSec officer

Feb 2017 - Feb 2019

[StartMail](#) · The Hague, Netherlands

I was one of four senior developers at StartMail, a privacy-focused email service. During my two years there, our team took ownership of the entire software and infrastructure stack, taking it fully in-house after it had previously been outsourced to an external IT company.

- Rebuilt all core infrastructure, migrating all customer data into three new datacenters.
- Designed Infrastructure-as-Code policies with Ansible to manage StartMail's virtual machines and physical hypervisors.
- Served as StartMail's information security officer.

## Projects

### Creator and maintainer

Dec 2020 - Present

[Obsidian Export](#)

Written in Rust, this open source project of mine provides both a CLI and library interface to export an [Obsidian](#) vault to regular Markdown.

### Core maintainer

Oct 2012 - May 2018

[Errbot](#)

A chatbot that's written in Python and which continues to flourish to this date, this was my first major involvement with open source software and project management. In addition to the usual release testing, issue triage, bug fixing and community engagement, I consider these my main accomplishments:

- Wrote chat backends for Slack, Skype, Telegram and Gitter, extended existing XMPP and IRC backends.
- Implemented regex- and [ArgParse](#)-based command decorators to support [complex bot commands](#) with argument parsing and validation similar to that of modern CLI applications.
- Designed the project website and wrote the majority of API and user documentation (using [Sphinx](#)).
- Implemented Access Control Lists (ACLs) for [fine-grained restrictions](#) of available commands.

## Volunteering

### Evenementenhulpverlener

Sep 2019 - Present

[Red Cross](#)

As a volunteer for the Dutch Red Cross, I help provide first aid at various small- and large scale events throughout the Netherlands. I'm a member of the bike teams and prefer big events like Kingsday, the [Dam tot Dam](#) or [TCS Amsterdam](#) marathons.

### Noodhulp Teams

May 2021 - Present

[Red Cross](#)

As a member of the the [Noodhulp Teams](#) for the districts Kennemerland and Amsterdam, I'm on-call 24x7 to assist in case of major accidents (think airplane and train crashes, terrorist attacks, etc.). In addition to being a regular team member, I'm also designated as a driver, certified to drive emergency vehicles with lights and siren.

Varvara Tzika

*"As a scrum master I was really happy to have Nick at my team. He always thrives to improve himself, the team and the organisation. He was honest and rational and that helped the team as well. He was always asking the hard questions and that helped also the team to see their problems and improve. Also, Nick was always willing to help anyone needed him."*

## Languages

English · Professional

Dutch · Native

## Links

[nick.groenen.me](https://nick.groenen.me)

[linkedin.com/in/nickgroenen](https://linkedin.com/in/nickgroenen)

[github.com/zoni](https://github.com/zoni)