# Joost Visser

## Software Developer & Generalist

Versatile engineer building scalable systems and developer tools. I bridge technical architecture and team communication to drive high-impact results.

**Portfolio:** https://joostvisser.dev

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## Tech skills

**Programming:** Python, Rust, Dart, TypeScript, Java, C, C#.

**Tools/Infra:** Azure, Terraform, Docker, Kubernetes, GitHub Actions, Jenkins.

**Frameworks:** Nest.js, Svelte, Django, Flutter.

## Personal skills

**Communication:** Facilitating cross-functional team alignment.

**Presentation:** Hosted technical events for audiences of 100+ people.

**Mentorship:** Big fan of giving workshops and raising the bar for the whole team.

## About me

**Languages:** English, Dutch, Japanese

**Hobbies:** Travelling, climbing, karaoke, indie games, reading, coffee, padel

**Favorite OS:** Currently loving Fedora with COSMIC.

## Work History

### Software Developer
Jul '24–now

AgXeed, Grubbenvorst, Netherlands

- **Cloud & IaC:** Re-architected legacy backend to distributed systems via Terraform, cutting costs by 10x and enabling auto-scaling to 100+ nodes.
- **Developer Tooling:** Engineered internal Python CLI tooling (Typer, uv) and automated NuGet deployment scripts to streamline developer workflows.
- **Computational Geometry:** Engineered high-level polygon and pathing logic, applying advanced data structures to solve geometry problems.

*Tech stack:* C#, Python, Azure, Terraform, CI/CD, GeoJSON, REST

### Full-stack Developer (temporary project)
Apr '23–Apr '24

ELEO, Helmond, Netherlands

- **Product Development:** Developed and designed the product's Windows tooling app and API.
- **Infrastructure & CI/CD:** Set up and implemented our CI pipeline and Azure infrastructure, increasing our test coverage from 2% to over 60%.
- **Agile:** SCRUM Master, increasing goal delivery rate from 20% to 90%.

*Tech stack:* Dart, Flutter, Nest.js, Svelte, C++, Azure, Terraform, PostgreSQL

### Embedded Software Engineer
May '21–Mar '23

Lightyear, Helmond, Netherlands -- Vacated position due to bankruptcy

- **CI/CD & Infrastructure:** Established Python infrastructure, test frameworks, and automated CI tooling to support hardware integration.
- **Version Control:** Introduced versioning, changelogs, and trunk-based development to stabilize the codebase.
- **Technical Leadership:** Organized quarterly alignment events and workshops to bridge knowledge gaps across engineering teams.

*Tech stack:* Python, C, CircleCI, Docker, Git, CAN, CCP, SonarQube, Rust

### Algorithm Developer
Apr '20–Apr '21

SmartQare, Eindhoven, Netherlands

- **MDR Compliance:** Led a data-driven literature analysis of 1,000+ papers to secure clinical evidence for medical approval.
- **Biomedical Algorithms:** Engineered a reliable fall-detection algorithm.

*Tech stack:* Python, Jupyter notebook, Confluence

### University Teacher in Algorithms & Data Structures
Apr '21–May '21

Avans University of Applied Sciences, Breda, Netherlands

## Qualifications

### MSc - Computer Science - Cum Laude (TU/e)
Sep '16–Feb '20

Eindhoven University of Technology, Netherlands

- **Published AI paper:** unsupervised object localisation (StampNet).
- **Exchange:** Research in game AI at Tohoku University, Japan.
- **Leadership:** Served as chairman for the Japanese culture association.
- **Competitive Programming:** placed first in the Netherlands at NWERC 2016.

### BSc - Software Science (TU/e)
Sep '12–Jan '16

## Highlights

▶ **Conference Paper - StampNet**                                        Sep '19
IEEE - International Conference on Image Processing

Published my master thesis on a novel neural network architecture for
unsupervised multi-class object localisation.

- **Publication:** https://arxiv.org/abs/1902.02693

▶ **Exchange Japan**                                                Apr '19–Aug '19
Tohoku University, Sendai, Japan

Conducted research at one of the top universities in Japan.

- **Research:** Received 'AA' grade for reinforcement learning research project.
- **Language:** Received 'AA' grades for both B1 Japanese language courses.

▶ **Chairman Kinjin**                                              Sep '17–Sep '18
Japanese culture association Kinjin, Eindhoven

- **Operations:** Successfully relocated headquarters and restructured
  administration and website.
- **Event Management:** Led and organised our largest-ever festival for the
  association's lustrum.
- **Partnerships:** Organised collaborations including talks and movie screenings
  with local cinema.

▶ **NWERC - European Algorithm Contest**                      Nov '15, '16, '17
Linköping University, Linköping, Sweden
Bath University, Bath, United Kingdom (2x)

Qualified for NWERC three years in a row after passing both Eindhoven and
Benelux preliminaries in this international programming contest.

- **Top Result:** Ranked #1 Dutch team at NWERC 2016 (13th of 114 overall).

▶ **Exchange Sweden - Embedded Systems**                      Sep '14–Jan '15
Mälardalen Universität, Västerås, Sweden

- **Results:** Got 'pass with credit' or 'pass with distinction' for all courses.

## Projects

▶ **Portfolio Website**                                                 May '24
Eindhoven, Netherlands

My own personal portfolio website: https://joostvisser.dev.

- **Infrastructure:** Self-hosted on a Kubernetes cluster with CI/CD pipeline.

*Tech stack:* TypeScript, Svelte, Kubernetes, Github Actions, Tailwind, Node.js

▶ **Fortune Slip Generator**                                      Apr '23 - Jul '23
Eindhoven, Netherlands

A configurable CLI tool that generates printable PDF fortune slips for events.

- **Modularity:** Fully configurable design via YAML configuration.

*Tech stack:* Rust, Github Actions

▶ **Cafetaria Website**                                           Feb '16–Apr '16
Horeca Recreatiebad Stappegoor, Tilburg, Netherlands

A full-stack web application for the cafeteria of swimming pool Stappegoor.

- **Reliability:** Ran in production for multiple years without issues.

*Tech stack:* Ruby on Rails, Bootstrap, HAML, SCSS, Coffeescript