Thibaut van Bergen

Python Software Engineer

• Amsterdam, NL



Summary — Product-minded Software Engineer with 6+ years of experience in Python-based greenfield projects, with background in engineering, robotics & Al. Specialised in end-to-end development of cloud-native (web) applications (B2B, SaaS), in Agile/Scrum multidisciplinary teams within start-ups and international corporations. Strong advocate of clean code, automated workflows and clear communication for optimal collaboration.

Experience

Present Jun 2022

Founder @ Stacktful - Amsterdam, NL

As a Freelancer, developed and/or launched various cloud-native web applications for different clients/projects:

 ${\bf DevOps\ Engineer\ @\ Louwman\ Group-Den\ Haag,\ NL\ (Remote)-} {\bf Feb\ 2025\ -\ Present}$

Trimbel — cloud-native platform for car dealerships to manage their inventory and sales

> Setting up the cloud infrastructure (Azure) and CI/CD pipeline (Azure DevOps) for the platform with Infrastructure-as-Code (Terraform).

Azure Terraform CI/CD Git Azure DevOps Agile Scrum

Software Engineer @ ACT Commodities — Amsterdam, NL — Jun 2024 - Oct 2024

Talos — cloud-native ecosystem of distributed, event-driven apps handling regulatory reporting of ACT's trading activities

- > Monitored and optimized reporting functions ensuring accurate and compliant daily trade activity submissions.
- > Added automations to reporting workflows, further reducing operational workload and manual intervention from engineers.
- > Investigated and corrected inaccurate historical reports, enhancing data integrity and regulatory compliance.

Python PostgreSQL Azure Pytest CI/CD Git GitHub Jira Agile Scrum

Software Engineer @ WhiteSpace Solutions — Den Haag, NL (Remote) — Jan 2024 - Apr 2024

AIM® — cloud-native multi-tenant web application (SaaS) for AI-driven well trajectory optimization and planning

- > Repaired REST API server's long broken data import and export endpoints and improved data models.
- > Decoupled backend optimization (micro)services from databases to ease workload of algorithm developers.

Python | FastAPI | PostgreSQL | Docker | Google Cloud | Pytest | CI/CD | Git | GitHub | OpenAPI | Swagger | Notion | Agile | Scrum

Lead Software Engineer & Scrum Master @ Ebitwise — Amsterdam, NL (Remote) — Jun 2022 - Oct 2023

DashWise® — cloud-native multi-tenant web application (SaaS) presenting real-time financial dashboard for start-ups / scale-ups

- > Architected application's full stack i.e. frontend, backend (REST API), database, cloud infrastructure and launched MVP.
- > Created CI/CD pipeline from ground up, including testing, automated workflows, infrastructure-as-code, and deployment.
- > Built user authentication system using OpenID Connect, OAuth2.0, JWT and designed role-based access control (RBAC).
- > Built automated ETL pipeline drawing client data (from Exact Online API to BigQuery) to create financial dashboard data.
- > Set up and lead teams's Agile/Scrum ceremonies with automated workflows (ClickUp) and communication channels (Slack).

(Python) (Flask) (ReactJS) (JavaScript) (Docker) (Google Cloud) (BigQuery) (Terraform) (Pytest) (CI/CD) (Git) (GitHub Actions) (ClickUp) (Agile) (Scrum) (Flask) (F

Oct 2022 Feb 2021

Software Engineer & Scrum Master @ Avonic — Delfgauw, NL

CamDirector® — Al-driven multiple camera system for automated lecture recordings with 'teacher tracking'

- > Developed CamDirector from early prototype to MVP launch through iterative field testing and user feedback.
- > Refactored code extensively to create clean, modular and decoupled software architecture and optimized tracking algorithms.
- > Completely revamped CamDirector's server-side rendered (SSR) application and improved UX design for MVP launch.
- > Performed code reviews and tutoring juniors on software engineering best practices (Clean Code, SOLID principles etc.).
- > Improved team's Agile / Scrum incl. setting up project management workflows and automations, and leading ceremonies.

Mar 2020 Dec 2018

Software Engineer @ Fleet Cleaner — Delft, NL

 $FLS\ Localization - On board\ localization\ system\ for\ ship-hull-cleaning\ robot\ based\ on\ Forward\ Looking\ Sonar\ (FLS)\ images$

> Delivered Proof-of-Concept for automated localization system enabling centimeter-level accuracy, including image filtering & processing, quay wall detection, target tracking and sensor data fusion (i.e. Extended Kalman Filter).

Python OpenCV NumPy Cython Git Jira

Skills

Software > REST APIs — Python Django Flask FastAPI

> Databases — PostgreSQL BigQuery SQLite SQL

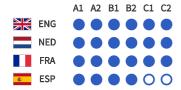
> Web Development — ReactJS JavaScript HTML CSS

DevOps

- > Cloud Computing Google Cloud Azure AWS
- > Infrastructure-as-Code Terraform
- > Scripting & Automation Python Bash

- $\textbf{>} \ \, \mathsf{Test\text{-}Driven} \, \, \mathsf{Design} \, (\mathsf{TDD}) \underbrace{\hspace{1.5cm} \mathsf{Pytest} \, \big(\mathsf{Unittest} \big) \, \big(\mathsf{mypy} \big)}_{} \\$
- > API Documentation OpenAPI Swagger Postman
- > Version Control Git GitHub
- > Containerization Docker
- > CI/CD GitHub Actions Cloud Build
- > Agile Scrum (Kanban (Jira Confluence ClickUp (Slack)

▲ Languages



Strengths

- > Growth mindset
- > Pragmatic & result-driven
- > Complex problem solving
- > Teamwork & workflow optimisation
- > Multicultural interpersonal skills

Education

BSc & MSc Mechanical Engineering @ Technische Universiteit Delft — Delft, NL

Specialisation in BioRobotics (Robotics and AI)

- > Autonomous Drone Competition: design of AI computer vision algorithm (Python/C++) for obstacle avoidance, broke record of longest distance traveled without collision.
- > Minor: Electric Engineering for Autonomous Robots

 (Python)
 (Matlab)
 (Simulink)
 (C)
 (C++)
 (Delphi)
 (Robotics)
 (Al (Computer Vision))
 (Machine Learning)
 (Algorithms)

French Baccalaureat @ Lycée Français Vincent van Gogh — Den Haag, NL

Scientific Track, with High Honors (17/20)

> Delegate @ Model United Nations (MUN): 2009, 2010, 2011

Certifications

AWS Certified Solutions Architect — Associate (SAA-C03) @ Amazon Web Services — Online

In progress (expected completion by Mar 2025)

P Extracurriculars

Nov 2018 May 2018

Research & Development Engineer (Intern) @ Nippon Electric Company (NEC) — Tokyo, JP

Project MIDoT® — IoT device for topical audio indexing via Micro Identifier Dot-on-Things (MIDoT®) technology

- > Prototyped device as proof-of-concept from scratch, covering hardware, electronics, embedded software and data processing.
- > Designed and 3D-printed MIDoT® application mechanism, developed circuitry, and integrated sensors, camera and microphone.
- > Created and tested control software integrating MIDoT® pattern recognition algorithm and real-time sensor data processing.
- > Presented prototype and research findings in a conference paper at the IEEE 5th World Forum on IoT 2019.

 Python OpenCV NumPy Arduino C++ SolidWords 3D Printing Circuit Design Sensors ToT

Feb 2018 Jan 2017

President of Executive Board @ Study Association Antoni van Leeuwenhoek (AvL) — Delft, NL

Study association affiliated with the BioMedical/BioMechanical Engineering (BME/BMD) MSc programs at TU Delft

- > Led board of 7 members and ±100 active members, managed association's finances, events, marketing and communication.
- > Organised and hosted social events, guest presentations, excursions and career fairs.
- > Conducted market research for a prosthetics startup (Reboocon Dynamics), our study trip sponsor.

 $\begin{tabular}{ll} \hline Team Management \end{tabular} \begin{tabular}{ll} \hline Event Organisation \end{tabular} \begin{tabular}{ll} Financial Management \end{tabular} \begin{tabular}{ll} Marketing \end{tabular} \begin{tabular}{ll} Communication \end{tabular} \begin{tabular}{ll} Networking \end{tabular}$

Jan 2016 Aug 2015

Vehicle Dynamics Engineer @ Formula Student Team Delft — Delft, NL

 ${\tt DUT16-Battery-powered\ electric\ 4WD\ race\ car\ for\ Formula\ Student\ competition\ (2016\ edition)}$

- > Created dynamic models (Matlab) to analyse the car's performance w.r.t. its geometrical parameters.
- > Used models to determine optimal geometry for highest performance in the vehicle dynamics perspective.

Matlab Simulink

Interests

 $\textbf{Interests} \quad \text{Traveling (± 40 countries)} - \text{Technology} - \text{Psychology} - \text{Cosmology} - \text{Philosophy} - \text{Mathematics}$

 $\textbf{Languages} \quad \text{English (C2)} - \text{French (C2)} - \text{Dutch (C2)} - \text{Spanish (B2)} - \text{German (B1)} - \text{Portuguese (B1)} - \text{Russian (A2)}$

Sports Dancing (Salsa & Bachata) — Fitness — Skiing — Motorsports (Karting) — Surfing — Football — Tennis — Field Hockey (played National Youth League @ Klein Zwitserland)

References

Conno Kuyt — Head of Product @ Ebitwise

in https://www.linkedin.com/in/connokuvt

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Krittaboon Tantikarun — Software Engineer @ ACT

in https://www.linkedin.com/in/krittaboon-tantikarun

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