Dennis Jensen's GitHub Stats

★ Total Stars Earned: 11
 ★ Total

Total Commits (2025): 1.4k

 1 Total PRs:
 781

 (!) Total Issues:
 399

Contributed to (last year): 58



Summary

For the past 8 years, Dennis has been a motivated software engineer, eager to apply his skills in the development of impactful software products and services. The consultant specializes and has an interest in general Software Engineering, DevOps, Cloud Engineering, Data Engineering, and Machine Learning.

General Software Engineering, DevOps, and Cloud Engineering are areas where Dennis's core competencies lie, and there are numerous skills to draw upon for various needs. When developing products and services, the consultant focuses on software architecture, reliability, efficiency, and maintenance.

To ensure that software products are usable and valuable, it's important for Dennis personally to understand the why and what of development, focusing on how the work will influence or assist customers in achieving their goals.

Experience since: 2017

Main competence areas

Developer Operations

Cloud

Architecture and method

Artificial Intelligence

Internet of things

Work roles

Lead Developer Engineer

Solution Architect

DevOps Engineer

Frontend Developer

Backend Developer

Industry knowledge

Business services: Consultancy, Data processing

Construction

Utility infrastructure: Electricity, Water, Sewage, Heating, Gas, Telecom, Internet

Finance: Bank

IT: Consultancy, Data Centers & Cloud, Data processing, Software vendor

Production: Pharmaceuticals

Application and business focus

I always prioritize effective Developer Operations in every project I undertake. The efficiency and scalability achieved with robust developer operations are crucial for fast and quality development.

I place great emphasis on a software application's impact on Business value. After all, software is just a tool to create change.

Positions and projects

Freelance consultancy

Date: 2023 November - Present

Description

As a freelance consultant, the consultant Dennis applies his knowledge within software development, DevOps and cloud infrastructure to help companies produce better quality software and infrastructure. Always with an eye on the value it brings.

Freelance: DevSecOps engineer consultant at Link Logistics

Date: November 2023 - Present (Contracted until 2025 March)

Company: Link Logistics

Building a DevOps with GitOps best practice platform with Infrastructure as Code, Continous Integration and Continous Deployment

My responsibilities/actions were

- Provision all infrastructure as code (Terraform) for the Azure platform, networking, managed Kubernetes cluster AKS, Azure Functions, and Azure Web Apps.
- Build best practice reusable CI/CD pipelines around GitOps deployments with ArgoCD and custom deployment engines written in Golang and migrating from Azure DevOps to GitHub Actions.
- Automated integration tests interfacing with deployments and their infrastructure and including SonarCloud as a static code analyzer.
- Building everything containerized in Linux containers (Docker) and modularized for easy deployment and consistent environments across development and production.

 Onboarding and training a team of two full-time employees and two part-time employes to the DevSecOps platform.

DevOps	Terraform	Kubernetes
Software release management	Test-driven development	Kanbans workflow
Developer Operations CI/CD	Azure Cloud	Linux
Golang	C#	Software quality processes and gates

Freelance: Digitalization and Business Optimization – Full-Stack Systems Engineer

Date: June 2024 - Present

Company: Fensmark Miljø

I have developed a complete solution integrating server infrastructure, backend, frontend, and edge devices to support a digital dashboard platform for visualizing the company's revenue and daily KPIs. The entire solution was built from the ground up and tailored to the company's specific needs.

As part of the solution, I set up a kiosk mode for edge devices and provisioned both the backend server and the operating system using Nix flakes, ensuring consistency, stability, and easy redeployment.

My responsibilities/actions were

Servers & Infrastructure:

- Used Nix flakes to provision both the backend server and Linux servers, including OS images.
- Configured NGINX as a reverse proxy and for managing HTTPS certificates.
- Set up networking and DNS to connect system components.

Backend:

- Developed backend services in Rust for integration with e-conomic and Mobilplan APIs.
- Managed and structured data for dashboard visualization.

Frontend:

- Built the dashboard in Angular with TypeScript, visualizing KPIs and revenue data.
- Made microservices for interaction and business processes.

Embedded Applications:

- Designed and implemented a kiosk application for Raspberry Pi 4, functioning as edge devices.
- Configured kiosk mode using an operating system provisioned with Nix flakes for stability and easy maintenance.

Angular (Web Framework)	Linux	DevOps
Frontend	Backend Development	Rust
Systems Design	Nix	On-premises Infrastructure

Digitalt Håndværk

Date: 2023 November - Present

Company: Digitalt Håndværk

Description

The consultant owns the company Digitalt Håndværk which offers services to the construction industry.

Digitalt Håndværk - Platform

Date: Jan 2024 - Present

Role: Full Stack Software Engineer

Description

The consultant is developing a data platform called Digitalt Håndværk, specifically designed for the construction industry, utilizing artificial intelligence and other digital tools to optimize work processes. The platform builds on top of classical data processing and processes information with AI algorithms extracting the useful information for the construction industry.

Continuous Integration	Nix	Rust
Leptos	Fly.io	Google Cloud
AutoCAD	Test Driven Development (TDD)	Geospatial Information System data
Kubernetes	Generative AI	Vector databases
OpenAI	Terraform	

Digitalt Håndværk - LER GML Converter

Date: Mar 2023 - Present

Role: Full Stack Software Engineer

Description

The consultant has developed a GML converter that is capable of transforming Geographic Markup Language (GML) files into DXF files. This tool is specifically designed to retain attribute data from the GML files when they are converted to the DXF format.

Continuous Integration	Frontend	Python
Serverless	Google Cloud	Firebase
AutoCAD	Test Driven Development (TDD)	Continuous Deployment
Kubernetes		

Position: Software Engineer in

Data - Consultant

Date: Apr 2023 - November 2023

Company: KPMG

I worked in KPMG Denmark NewTech working with clients implementing cutting edge data-driven solutions.

Description

As a versatile Data Engineer Consultant, my foundation in software engineering has empowered me to work across various domains. I've developed successful projects on Quantum Inspired Optimization and developed AI-driven enterprise chatbots utilizing ChatGPT and semantic search. I've utilized Quantum encryption software to improve data security and developed Third Party Risk Management software analysis tools. I have designed solution architectures on several of these projects and done a lot of project scoping, striving for efficient execution aligned with business objectives. My proficiency in DevOps expands to MLOps and has enabled streamlined collaboration between data scientists and operations, elevating model deployment and monitoring. With a good Scrum background, I've been a part of fostering a teamwork-centric, agile environment, delivering highvalue results.

Software solution architecture	Cyber security encryption	Semantic Search and LLM models
Software release management	Test-driven development	Scrum workflow
Developer Operations CI/CD	Data pipelines	Cloud infrastructure

API Design Project time quality specification estimation processes and gates

Automated inventory management

Date: Aug 2023 - Okt 2023

Role: Lead Software Engineer

Description

As a Lead Software Engineer, the consultant worked with a Serverless Cloud infrastructure. This setup involved the design and implementation of CI/CD pipelines for an inventory management model, as well as the integration of databases.

In addition, he served as the scrum master to make sure the project was going in the right direction and allocating work for one additional engineer.

Python	Microsoft Azure SQL Database	DevOps
Continuous Deployment	Serverless	Continuous Integration
Event- Driven Architectur e	Scrum Master	

Quantum Inspired Optimization - Open Source

Date: Jun 2023 - Sep 2023

Role: Lead Software Engineer

Description

The consultant has taken over a Quantum Inspired Optimization toolkit, a tool in the process of being open-sourced. The tool offers a framework for mathematical optimization in NP Hard problems.

As the project's lead developer and open-source manager, the consultant has conducted analyses of the security, quality, and dependency analysis of the codebase. Moreover, he has developed a plan for the tool's journey to open source and its long-term maintenance. This plan includes automated quality checks in CI/CD pipelines, compilation of the tool, and the formulation of contribution guidelines and a code of conduct guideline.

C++	CMake	DevOps
Open Source	GitHub	Release management
Release Automatio n	Documentation	Continous Integration
System protocol	Backend solution	Docker

Third Party Risk Management Optimization

Date: May 2023 - Jun 2023

Role: Lead Software Engineer in Data

Description

The consultant has been part of the work on third-party risk management, where he developed data pipelines and conducted data analyses on compliance issues using semantic search and LLM models. He has processed unstructured data, analyzed potential pitfalls in the data, and identified areas for process optimization.

Based on these data analyses, the consultant has prepared a conceptual solution design. This design had the potential to digitalize the entire process and laid the foundation for a future AI transformation of the solution.

Semantic Search	Python	Data Engineering
Process Optimization	Docker	Test Drive Development (TDD)

MLOps platform

Date: Apr 2023 - May 2023

Role: Software Engineer

During his first project at KPMG, the consultant was involved in the development of an MLOps platform. This encompassed cloud infrastructure as well as Continuous Integration and Continuous Deployment pipelines. The whole infrastructure was built on Azure Cloud.

MLOps	DevOps	Python
Azure Cloud	Bicep	

Position: Software Engineer in

IoT

Date: Jan 2022 - Apr 2023

Role: Full Stack Software Engineer in IoT



Company: Silicon Labs

<u>Silicon Labs</u> is a leading provider of silicon, software, and solutions for a smarter, more connected world.

Description

The consultant held multiple roles during his tenure at Silicon Labs. These roles included embedded Linux software development, edge-to-cloud software, DevOps cloud platform development, and the development of secure wireless software technology. All of these areas were an integral part of the daily work he performed at Silicon Labs.

As a DevOps architect, one of his main responsibilities was to maintain and enhance the DevOps platform that supported a team of over 20 developers. Additionally,

the consultant was responsible for developing bridge software that integrated Silicon Labs' Unify SDK IoT gateway with various IoT ecosystems such as Matter and Home Assistant.

Cloud	DevOps	Software
Engineering	Engineering	Engineering
Docker	Nomad	

Unify IoT Gateway SDK

Date: Jan 2022 - Apr 2023

Role: Software Engineer

Description

In his role as a Software Engineer, the consultant managed a software stack that, among other things, contained bridge software that integrated several IoT ecosystems together. This was realized using code generation tools, where he contributed to the development of a data model that drove code generation. As a result, the software was generated directly from the data model, making the development process incredibly fast.

Overall, the consultant was responsible for the application code for several Protocol Controllers and supporting applications. All these applications were executed as systemd applications on Raspberry Pi OS.

C/C++	Rust	Event- Driven Architecture
Linux	Data modelling and design	Test Driven Development (TDD)
MQTT	Streaming	

Unify IoT Gateway SDK

Date: Jan 2022 - Apr 2023

Role: Lead Developer Operations Engineer

Description

The consultant took on several developer roles at Silicon Labs, including the role of Lead DevOps Engineer. In this capacity, he was the architect behind several CI and CD pipelines. In addition to this, he played a key role in the development of the cloud infrastructure and worked intensively with AWS spot workers to drive CI/CD pipelines in Jenkins. This included a CD pipeline designed to deploy the SDK to an open-source repository and hosting of documentation.

The CI pipeline, among other things, handled the compilation of source code for various CPU architectures. This pipeline had seven parallel tracks, covering the generation of documentation using Sphinx and Doxygen, code coverage, compilation for x86 and arm architectures, memory leakage checks, and deployment to an RPi4 with accompanying integration tests.

Continuous Deployment	Continuous Integration	Devops
CMake	Integration testing	Python
Cloud Engineering	Jenkins	Docker
AWS Cloud		

Unify IoT Gateway SDK

Date: Jan 2022 - Apr 2023

Role: Frontend Software Engineer

Description

The Unify SDK Gateway was implemented on an RPi4, functioning in a manner similar to a wireless router, but specifically designed for IoT devices. This led to the development of a control panel, which in practice was a website we hosted directly on the RPi4. Through this website, it was possible to visualize and control all the devices connected via the Unify SDK Gateway.

The website was developed in React with TypeScript and was executed as a systemd service on the RPi4. The consultant played a central role in the beginning of the project in this development process.

TypeScript	React	Event- Driven Architectur e
MQTT	Streaming	Frontend

Position: Student Software Engineer

Date: May 2020 - Jan 2022

Company: Silicon Labs

<u>Silicon Labs</u> is a leading provider of silicon, software, and solutions for a smarter, more connected world.

Description

Before the consultant entered a full-time position at Silicon Labs, he had already gained valuable experience in the company as a student assistant. Even in this part-time role, his responsibilities were the same as those in his full-time position. His skills as a student assistant were recognized as being on par with the full-time software engineers, meaning his areas of responsibility were in line with the other developers. When he transitioned to the full-time position, he simply had more time to invest in the same tasks.

The concepts and projects in the full-time position were the same ones the consultant worked on as a student. Therefore, they are not repeated here.

Position: Test Automation

Engineer

Date: Okt 2018 - May 2020

Company: Phase One

Phase One is a Danish company specializing in highend digital photography equipment and software.

Description

The consultant's position at Phase One placed him in a test team consisting of four people. Here, he was responsible for developing a test automation framework to test camera products, while also supporting a team of 10 software developers. The consultant's work also included the design and development of a "hardware-in-the-loop" test framework in Python.

Test automation	Integration testing	Continuous Integration
Jenkins	Quality Assurance (QA)	Image Analysis

Position: Data specialist

Date: Okt 2017 - Okt 2018

Company: Bolig portal

Description

The consultant's position at BoligPortal involved the development of web scrapers that collected housing advertisements from Swedish websites. Additionally, he handled tasks related to database management and the development of APIs for the frontend.

MySQL	Web Scraping	Python
Data Engineering		

Position: Personal Projects - But not less relevant projects

Date: Okt 2017 - Present

Role: Full Stack Software Engineer

Company: Digitalt Håndværk

Description

In addition to Dennis professional roles, the consultant has always been engaged in side projects. This has resulted in a range of projects that are relevant in many contexts, especially when discussing new initiatives and competencies.

DevOps Engineer	Cloud Engineering	Docker
Kubernetes	Semantic Search	Google Cloud
Fly.io	Software Engineering	Software Architecture
Open source		

Digital Craftsman - personal portfolio website

Date: Juli 2023 - Present

Role: Full Stack Software Engineer



Description

Digital Craftsman is the consultant's personal website, which serves as a platform for his skills and articles he has written. The website is built with Angular and a Rust-based backend. The consultant has integrated an LLM model that answers questions about him based on his skills, as well as a Qdrant vector database for semantic search. The website is hosted on the Fly.io cloud

service, and a CI/CD pipeline has been established for automatic deployment and automated quality checks.

Frontend	Cloud Engineering	Continuous Deployment
Continuous Integration	Semantic Search	LLM Development
Docker	Data Pipeline	Rust

Coverage-Scope - Open Source GitHub action tool

Date: May 2023 - Present

Role: Software Engineer



Description

The consultant has developed a lightweight quality gate for code coverage in GitHub Actions. This quality gate was designed with the purpose of helping older projects improve their code coverage. The quality gate focuses on the code coverage of code changes and sets this coverage to a specific standard. This is relevant for any project, but the idea originally arose as a tool to encourage developers to write tests in projects without code coverage. The consultant uses it extensively on all of his own projects.

Code Coverage	Unit testing	Rust
Continuous Integration	Quality Assurance (QA)	Devops
Test Driven Development (TDD)		

LER GML Data visualization

Date: Feb 2023 - Present

Role: Full Stack Software Engineer

Description

The consultant has developed an application that allows for geovisualization of underground infrastructure based on Geographic Markup Language data. This application helps users easily access the location of underground infrastructure, which is particularly useful when they are working in the field.

Fastlane iOS / iOS SDK	Android development	Flutter
Golang	Serverless	Firebase

Facebook scraping notifier

Date: Aug 2022 - Present

Role: Backend Software Engineer



Description

The consultant has designed a simple web scraping application. This service scrapes data from a specific Facebook page to notify his partner when a cancellation occurs at a sought-after hairdresser. It operates on a simple infrastructure that uses an AWS EC2 instance running as a Docker container. The application goes through the Facebook page every minute and automatically sends an SMS message to the consultant's partner upon detecting a cancellation.

AWS Cloud	Web Scraping	Python
Cloud Engineering	Twillio	

Danish household power consumption - Energinet

Date: Aug 2021 - Present

Role: Backend Software Engineer



Description

The consultant developed an application that estimates electricity costs based on the difference between a fixed price and a variable price. This calculation was performed on an hourly basis, using data pulled directly from Energinet's API. By using this tool, the consultant discovered that by using fixed pricing, he paid about 800 kr more per month.

Golang Test Driven Development API De (TDD)

Competencies

Levels: Expert, Very Experienced, Experienced, Good Knowledge, Familiar

Roles

Role	Level	Last Used	Years
Software Developer	Expert	2025	8
Full Stack Developer	Experienced	2025	6
Software Architect	Experienced	2025	4
Cloud Engineer	Very Experienced	2025	6
DevOps Engineer	Expert	2025	8
Data Engineer	Experienced	2024	2
Scrum Master	Good Knowledge	2023	0.5

Industries

Industry	Level	Last Used	Years
Finance	Familiar	2023	0.5
Pharmaceutical	Familiar	2023	0.5
IoT	Very Experienced	2023	3
Professional Photography/Aerial Imaging	Experienced	2020	2
Construction	Good Knowledge	2025	3
Real Estate	Good Knowledge	2018	1.5
Logistics	Experienced	2025	1.5

Technologies

Technology	Level	Last Used	Years
Python	Expert	2025	8
C++	Very Experienced	2023	4
Bash	Expert	2025	9
Rust	Very Experienced	2025	6
Golang	Experienced	2025	4
Dart	Very Experienced	2023	2
С	Experienced	2023	3
TypeScript/JavaScript	Experienced	2025	5
SQL	Good Knowledge	2025	4
Groovy	Very Experienced	2023	3
Ansible	Very Experienced	2023	3
Bicep	Good Knowledge	2023	1
Nix	Experienced	2025	4
Terraform	Experienced	2025	3

Technology	Level	Last Used	Years
CMake	Expert	2023	3
Cargo	Very Experienced	2025	5
Poetry	Expert	2025	3
Generate Ninja (GN)	Experienced	2022	1.5
NPM	Experienced	2023	3
Yarn	Good Knowledge	2023	1
Fnm	Good Knowledge	2023	0.5

Software Frameworks

Framework	Level	Last Used	Years
Google Test	Very Experienced	2023	3
CMock	Very Experienced	2023	3
Pytest	Expert	2025	6
Angular	Good Knowledge	2025	3
React	Good Knowledge	2023	3
Kafka	Experienced	2023	2
MQTT	Expert	2023	3
Flutter	Very Experienced	2023	2
Axum	Expert	2025	4
Leptos	Very Experienced	2025	2

Software Infrastructure/Platform

Technology	Level	Last Used	Years
Linux	Expert	2025	8
Docker	Expert	2025	8
Docker-compose	Expert	2025	4
Kubernetes	Good Knowledge	2025	3
Nomad	Good Knowledge	2023	2
Google Cloud	Experienced	2025	3
Azure Cloud	Experienced	2025	3
AWS Cloud	Very Experienced	2025	3
Serverless	Good Knowledge	2023	1
Fly.io	Good Knowledge	2023	0.5
Hetzner	Experienced	2025	1

DevOps

Tool/Concept	Level	Last Used	Years
Azure Pipelines	Good Knowledge	2025	1.5
Fastlane	Experienced	2023	1

Tool/Concept	Level	Last Used	Years
Github Actions	Expert	2025	6
Gitlab	Experienced	2023	2
Jenkins	Expert	2023	5
Git	Expert	2025	8

Databases

Database	Level	Last Used	Years
PostgreSQL	Very Experienced	2025	5
SQLite	Very Experienced	2025	4
Azure SQL	Experienced	2025	1.5
Azure Storage	Experienced	2025	1.5
AWS S3	Experienced	2022	2
Azure Cosmos DB	Good Knowledge	2025	1.5
Firestore	Very Experienced	2024	2
MongoDB	Good Knowledge	2023	0.5

Software Concepts/Methods

Concept	Level	Last Used	Years
Software Release Management	Very Experienced	2025	5
Semantic Search	Very Experienced	2023	1
LLM Development	Experienced	2024	1.5
Data Pipelines (ETL & ELT)	Experienced	2023	1
Data Validation	Experienced	2023	1
Test-Driven Development	Expert	2025	6
Software Architecture	Very Experienced	2025	3
Wireless Technology	Very Experienced	2023	3
Robotics	Experienced	2022	2
Cyber Security	Experienced	2025	2.5
Machine Learning	Very Experienced	2023	3.5
Event Driven Architecture	Very Experienced	2025	4
Software Automation	Expert	2025	6