Arne O. Ose

20.04.1990

Gunnar Schjelderups vei 11B, 0485 Oslo

+47 911 79 566 | arneose@gmail.com

aros.com.co

Professional Profile

Senior Fullstack Developer and Infrastructure Lead with solid experience in cloud architecture, modern web development, and complex system integrations. Specializing in AWS infrastructure (CDK, SST), search solutions (OpenSearch/ElasticSearch), and React-based frontend development.

Currently contracted to DNB ASA, Norway's largest bank, where I lead infrastructure development and have primary responsibility for AWS architecture, search functionality optimization, and webforms library development. Early adopter of AI-assisted development tools like GitHub Copilot, consistently leveraging emerging technologies to maximize development efficiency.

Extensive academic background with experience as university lecturer and researcher, resulting in multiple peer-reviewed publications. Strong communicator who thrives in collaborative environments where quality, innovation, and continuous improvement are central.

Experience Overview

Period	Role	Organization
January 2025 - Present	Co-Founder	Colift AS
February 2024 - Present	CTO	IT Selskapet AS
January 2023 - Present	Independent Senior Consultant & Managing Director	AROS IT Consulting AS
June 2023 - July 2024	Webmaster	Round Table Norway
February 2021 - December 2022	Senior Consultant	ITverket AS
August 2018 - January 2021	Lead Consultant / Software Engineer	Capgemini
November 2017 - Present	Freelance Lecturer	University of Agder

Experience Details

Co-Founder | January 2025 – Present (2 years)
Colift AS

As a co-founder of Colift AS, I'm contributing to the development of the company's CRM system.

CTO | February 2024 – Present (3 years)
IT Selskapet AS

As CTO, I am primarily responsible for the company's technology strategy, where I actively support the CEO in decision-making processes related to technology choices and contract management. I lead development projects and am responsible for the follow-up and mentoring of a technical team of two employees.

Independent Senior Consultant & Managing Director | January 2023 – Present (4 years)
AROS IT Consulting AS

As the managing director of AROS IT Consulting AS, I am responsible for the company's operations, including accounting and marketing. I am fully contracted to DNB, where I deliver high-quality consultancy services in IT development.

Webmaster | June 2023 – July 2024 (2 years)
Round Table Norway

In the role of webmaster for Round Table Norway, I was responsible for the operation and maintenance of all the organization's IT systems. I also developed new websites and digital solutions to improve the organization's online presence.

Senior Consultant | February 2021 – December 2022 (2 years)
ITverket AS

As a senior consultant at ITverket, I contributed to both internal projects and external assignments for DNB. I also helped start a wine club, where I arranged social and professional wine tastings for the employees.

Lead Consultant / Software Engineer | August 2018 – January 2021 (3 years)
Capgemini

In my role as Lead Consultant and Software Engineer in Capgemini's Java department, I have been involved in the development of solutions for the Norwegian Public Roads Administration, including systems for the registration and reporting of traffic accidents. I also participated in the recruitment for IgnITe 2020, where I handled applications and interviewed over 100 candidates. Additionally, I have been an active part of the Java department's leadership team and have held presentations on advanced technology such as quantum computing.

Freelance Lecturer | November 2017 – Present (9 years)
University of Agder

I lecture in Supply Chain Management for master's students in economics, and I have contributed to the development of course materials.

Education

2012-08 - 2015-06: Master of Science - Industrial Economics and Technology Mgt. - University of Agder

2014-08 - 2014-12: Industrial Economics and Technology Management - California State University, Northridge

2013-08 - 2013-12: Computer Engineering, System Development - University of Agder

2012-08 - 2012-12: Bachelor of Engineering, Mechatronics - Queensland University of Technology

2010-08 - 2013-06: Bachelor of Engineering, Mechatronics - University of Agder

Technical Skills

Cloud & Infrastructure: AWS • CDK • SST • Azure • Firebase • Vercel • Netlify

Frontend: React • Next.js • Gatsby • Astro • Svelte • Tailwind • SCSS

Backend: Node.js • TypeScript • JavaScript • Java • Spring Boot • GraphQL • REST API

Search & Data: OpenSearch • ElasticSearch • Firestore • DynamoDB • SQL • Prisma

Development Tools: GitHub Copilot • VS Code • IntelliJ • Android Studio • Git • CI/CD

Methodology: Agile • Scrum • DevOps • Infrastructure as Code

Projects

DNB.no Webframe | September 2025 - Present Day
Backend Developer, Frontend Developer - DNB ASA
Modernization of DNB.no open pages using the Webframe architecture. Migration to Next.js with simplified backend setup using SST. Leveraging Azure for authentication and actively using AI tools like GitHub Copilot to accelerate development.

Key contributions include developing and optimizing search functionality, implementing webforms with CMS integration, and playing a central role in infrastructure development.

Led the development of infrastructure solutions and established proof-of-concept demonstrating SST viability for DNB's modernization strategy. Early adopter of AI-assisted development tools, significantly reducing development time through smart utilization of

emerging technologies.

Technologies: AWS • Azure • TypeScript • Node • Next.js • SST • React • GitHub Copilot
Project Link: **Click here**

DNB.se & Sbanken Webframe | September 2025 - Present Day
Backend Developer, Frontend Developer - DNB ASA
Webframe implementation for DNB Sweden and Sbanken, modernizing their open web pages with Next.js and SST backend architecture. Utilizing Azure authentication and AI-assisted development with GitHub Copilot.

Implementing search functionality and webforms solutions while contributing to infrastructure setup and optimization for both platforms.

Technologies: AWS • Azure • TypeScript • Node • Next.js • SST • React • GitHub Copilot
Project Link: **Click here**

DNB.dk Webframe Pilot | May 2025 - September 2025
Backend Developer, Frontend Developer - DNB ASA
Pilot project for Webframe architecture at DNB Denmark. Modernized open pages using Next.js and simplified backend setup with SST, establishing the foundation for future DNB web modernization projects. Integrated Azure authentication and leveraged AI tools for efficient development.

Developed proof-of-concept demonstrating SST's viability for DNB's infrastructure needs. Implemented search and forms functionality as part of the pilot, validating the architecture for subsequent rollouts.

Technologies: AWS • Azure • TypeScript • Node • Next.js • SST • React • GitHub Copilot
Project Link: **Click here**

DNB Carnegie Exploration | December 2025 - Present Day
Backend Developer, Frontend Developer - DNB ASA
Exploration and planning work for DNB Carnegie web presence, encompassing 7 different pages. Evaluating architecture and implementation strategies for the Carnegie platform. Utilizing Azure services and AI-assisted development tools.

Technologies: AWS • Azure • TypeScript • Node • Next.js • SST • React • GitHub Copilot

CoLift | January 2025 - Present Day
Full Stack Developer - Colift AS
A CRM system for the fitness industry.

Technologies: Next • React • Node.js • Prisma • SQL • Tailwind
Project Link: **Click here**

Course Platform | September 2024 - Present Day
Full Stack Developer - IT Selskapet AS
A course platform with admin login where users can create their own courses with video

uploads and quizzes.

Technologies: Next • React • Node.js • MUX • Prisma • SQL • Tailwind

Event Registration & Payment | August 2024
Full Stack Developer - AROS IT Consulting AS
A website for event registration and payment processing.

Technologies: Next • React • Stripe • Node.js • GitHub

Logo Generator | August 2024
Full Stack Developer - AROS IT Consulting AS
A website for creating logos. Built to experiment with generative AI APIs.

Technologies: Next • React • Node.js • GitHub • Tailwind
Project Link: **Click here**

Social Chat App | February 2024
Full Stack Developer - IT Selskapet AS
Development of a mobile application for a social chat platform, designed to connect users through real-time communication.

Work included development of real-time chat functionality, user authentication, and push notifications.

Functioning prototype with planned features. Ongoing development with continuous testing and improvements.

Technologies: React Native • Firebase

Mobile Dating App & Social Network | September 2023 - Present Day
Test Developer / Fullstack Developer - IT Selskapet AS
Development of a complete mobile platform for matching, chat, and confidential services not yet launched – with real-time database (RTDB), push notifications, camera, GPS location, and modular microservice architecture built on the Firebase ecosystem.

Fullstack development in Flutter/Dart with Firebase backend. Implemented data and file handling (images/videos) in Firestore + Storage. Built profiles with multiple images and metadata, chat with read status, typing indicator and push notifications (FCM), filtering by gender, age, distance using GPS + Google Places.

Testing with Android Studio emulator and physical devices. API testing (Postman) and synthetic test data. System testing across microservices.

Technologies: Flutter • Dart • Firebase • Firestore • FCM • CI/CD • Android Studio • VS Code • GitHub

IT Selskapet Website | September 2023 - Present Day
Technical Tester / Test Developer / Fullstack Developer - IT Selskapet AS
Building a modern website for IT Selskapet AS serving as both a marketing platform and a

technological foundation for product and project modules.

Fullstack development in Astro + React + Tailwind with shadcn/ui components. Implementation of Firebase Auth, Firestore and Functions. Setup of Vercel deploy/CI pipeline and environment variables.

Core features include start-project wizard and price/resource estimator, contact form with attachments and SendGrid integration, admin modules for menu, calendar and company profile. E2E and smoke tests on critical flows with automatic code validation (Prettier, ESLint, PR policy).

Technologies: Astro • React • Tailwind • shadcn/ui • Firebase • SendGrid • Vercel • Node.js • JavaScript • Git • GitHub
Project Link: **Click here**

Travel Blog | February 2023
Frontend Developer - AROS IT Consulting AS
Blog developed in Next.js, using GitHub as a CMS.

Technologies: Next • React • Node.js • GitHub • Tailwind
Project Link: **Click here**

AROS Landing Page | November 2023
Frontend Developer - AROS IT Consulting AS
Developed a landing page for AROS IT Consulting AS.

Technologies: Gatsby • React • GitHub Actions • SCSS
Project Link: **Click here**

Round Table Landing Page | June 2023 – July 2024
Frontend Developer - Round Table Norway
Developed and maintained a website for Round Table Norway using the Wix platform.

Design, development and maintenance of the website, including navigation setup, content structure and customization of existing Wix templates to meet organizational needs.

Technologies: Wix
Project Link: **Click here**

New DNB.no | 2021 - Present Day
Backend Developer, Frontend Developer, Infrastructure Lead - DNB ASA
DNB is Norway's largest bank, delivering complex and cutting-edge financial solutions to high-end clients and the public. Utilizing Azure for authentication services and actively leveraging AI tools like GitHub Copilot to accelerate development workflows.

As part of DNB's comprehensive IT modernization initiative, focused on enhancing performance, accessibility, and user experience of their open web pages. Key achievements include significant improvements to search functionality (speed and accuracy) and development of a webforms library with CMS integration for standardizing form handling across DNB.

Held primary responsibility for infrastructure development and maintenance, managing and evolving the entire AWS infrastructure through CDK. Early adopter of emerging AI development tools, consistently staying ahead of the curve to maximize development efficiency and code quality.

Technologies: AWS • Azure • CDK • TypeScript • Node • React • Gatsby • OpenSearch / ElasticSearch • GitHub Copilot
Project Link: **Click here**

Pomodoro Timer | May 2021
Full Stack Developer - Personal Project
Created to explore animation capabilities in Svelte. A Pomodoro timer that provides work time tracking to easily monitor if you have completed 7.5 hours of work.

Technologies: Svelte • Firebase
Project Link: **Click here**

Sales System | February 2021 - November 2020
Full Stack Developer - itVerket
Development of a dashboard for the sales department enabling clear visualization of ongoing tender processes, replacing an existing Excel-based solution. Originally built with TypeScript, React, Redux, Node and Express, later migrated to AWS Amplify with GraphQL.

Set up the React project structure and implemented Redux state management. Developed key GUI features including drag-and-drop functionality and customizable context menus. Created the Node.js backend and researched AWS cloud technologies to determine the optimal hosting solution.

The project evolved from using AWS CodePipeline with DynamoDB to AWS Amplify with GraphQL configuration for backend code generation, demonstrating adaptability to changing project requirements.

Technologies: AWS • AWS Amplify • GraphQL • React • Redux • TypeScript • Node.js • Express • DynamoDB

Traffic Accidents Registration & Reporting (TRULS) | October 2018 - November 2020
Full Stack Developer - Norwegian Public Roads Administration (Statens Vegvesen)
Comprehensive system for traffic accident registration and analysis, replacing a 30-year-old database system. The project consisted of three main parts: TRULS-Registration, TRULS-Reporting, and a public application called TRINE. The goal is to help reduce loss of life and serious injuries by making accident analysis easier with extensive positional data.

Central in development of TRULS-Registration: implemented logical controls for data consistency, created duplicate detection system, and built an extensive map solution using OpenLayers with data from National Road Database (NVDB) including counties, roads, speed limits and signs. Rewrote the map component to reusable NPM modules and migrated to React 16 hooks.

Led report generation using JasperReports in Java, implemented role-based access for sensitive data, created polygon-based accident filtering with backend algorithms, and secured the application based on OWASP top 10. Also contributed to the public TRINE application (trine.atlas.vegvesen.no) improving universal design using Axe Tools.

Technologies: Java • JavaScript • React • Spring Boot • OpenLayers • JasperReports • REST API • OWASP • NPM • Webpack
Project Link: **Click here**

IgnITe Trainee Program | 2018 - 2020
Participant Ignite Program - Stream Innovative Tech - Capgemini
IgnITe is a prestigious Nordic program designed to empower graduates by offering them an exceptional opportunity to embark on a successful career journey at Capgemini.

This comprehensive 1.5-year training program seamlessly integrates with customer assignments, enabling participants to gain profound insights into the vibrant Capgemini culture, agile work methodologies, diverse consulting roles, and promising career pathways.

Technologies: Presentation Skills • Workshop Facilitation • Sales and Delivery • Communication and Collaboration • Software Engineering Design Principles • Agile Approach • DevOps • Security
Project Link: **Click here**

Android App - Score Counter | 2017
Developer, Designer - Personal Project
Developed a fully functional application designed to track scores during badminton matches, specifically tailored for referees. Through this project, I gained valuable knowledge in XML and Android app development, further enhancing my skills in mobile application design and implementation.

Technologies: Android Studio • Java • XML

Master Thesis - Waste in Design and Engineering | 2015
Researcher - AS Nymo & University of Agder
I collaborated with a fellow student on a Master's thesis project conducted in partnership with the University of Agder and AS Nymo, a prominent supplier of drilling modules for the offshore industry.

Our objective was to examine the factors that contribute to inefficiencies in the design phase of complex EPC projects. Our findings were published as a peer-reviewed international article, receiving recognition and praise from both academic and industry experts.

Technologies: Case Study
Project Link: **Click here**

Early Projects & Education Projects

Integrert metodikk for prosjekteringsledelse (INPRO) (2013 - 2017) - *Veidekke Entreprenør AS, University of Agder, Norwegian University of Science and Technology (NTNU), Ulstein, AS Nymo, COWI*

Led by Veidekke in collaboration with esteemed industrial partners and renowned researchers from the Norwegian University of Science and Technology (NTNU) and the University of Agder (UiA), this visionary project aimed to revolutionize the planning process in the construction industry and beyond.

Technologies: Observational Study • Case Studies

Bachelor Thesis - Autonomous Robot (2013) - *University of Agder*

I conducted my Bachelor's thesis at UiA, where the aim was to design an autonomous robot capable of competing in a robotics competition held at Denmark's Technical University (DTU). The project revolved around utilizing a camera as a sensor to identify objects and measure distances accurately.

Technologies: LabVIEW • Microcontroller • Sensors

Robotic Arm Capable of Writing (2012) - *Queensland University of Technology*

In a robotics course at QUT, I developed an advanced robotic arm capable of writing letters based on user input.

Technologies: MATLAB

Microcontroller Snake Game (2012) - *Queensland University of Technology*

Developed a snake game using C programming language and a microcontroller.

Technologies: C • Microcontroller

Remote Controlled Car Through the Internet (2011) - *University of Agder*

During my time at UiA, I engaged in a development project as part of a Java course, collaborating closely with a fellow student. Our objective was to create a miniature car that could be remotely controlled via the internet, enabling individuals from remote locations, like China, to explore the facilities at UiA.

Technologies: Java • Microcontroller • SQL Server

Memory Game (2010) - *University of Agder*

Developed a console-based memory game utilizing text as graphics. Through this project, I acquired a fundamental understanding of C# programming.

Technologies: C# • Microsoft Visual Studio

2D Driving Game (2009) - *Personal Project & The Gathering*

Created a 2D driving game featuring a top-down view and multiple levels with increasing difficulty. The objective is to control a car and evade the pursuing police. As a result, I enhanced my programming skills and gained a foundational understanding of object-oriented programming (OOP). The game was showcased as my entry in a development competition at The Gathering.

Technologies: Adobe Flash • ActionScript 3.0

Point-and-Click Game (2007) - *Personal Project*

Created a point-and-click game featuring 2D graphics, animations, sound effects, music, and a menu. As a result, I gained valuable experience in game development using Flash and acquired fundamental programming knowledge.

Technologies: Adobe Flash • ActionScript 3.0

Other Work Experience

- Student Assistant in Control Systems
- Waiter, Cook, and Driver for a Restaurant
- Shop Assistant at a Grocery Store
- Assistant Church Caretaker
- Courier
- Self-employed Crab Fisherman and Seller

Volunteer Work

- Bouncer at Student Bars
- Mentor in a University Mentorship Program
- Co-founder and Developer of a Job Portal for Students
- Leadership Roles in a Youth Organization
- Active Participant in International Projects

Languages

- Norwegian (Native)
- English (Fluent)
- German (Basic Knowledge)
- Italian and Spanish (Beginner)

Interests

Technology, Training, Finance, History, Geography, Diving, Outdoor Activities, Cooking.

Publications

Kalsaas, B.T. og Ose, A.O. (2017)
Avhengigheter og koordinering i byggeplassproduksjon, Lean Construction. Forstå og forbedre prosjektbasert produksjon. Fagbokforlaget.

Kalsaas, B.T., Bonnier, K.E. & Ose, A.O. (2016)
Towards a Model for Planning and Controlling ETO Design Projects, 24th Annual Conference of the International Group for Lean Construction. IGLC.

Ose, A.O. (2015)

Basic Supply Chain Strategies, Supply Chain Management. Universitetet i Agder.

Bonnier, K.E., Kalsaas, B.T. & Ose, A.O. (2015)
Waste in Design and Engineering, 23rd Annual Conference of the International Group for Lean Construction. IGLC.

References

References available upon request.