


Sebastian Hedegaard Hansen

Design Engineer and Solution Architect



PROFILE

Experienced design engineer and solution architect specializing in the energy sector. Expertise in combining technical innovation within AI and software development with practical applications to enhance operational processes and user interfaces. Demonstrated success in implementing software solutions that significantly reduce costs and improve system interactions for some of the largest companies in the renewable energy industry.

 +45 23 41 60 53

 [Website with portfolio](#)

 Sebastian@Hedegaardhansen.dk

 [LinkedIn](#)

PROFESSIONAL EXPERIENCE

Technical Product Designer and Solution Architect

ZEVIT | Aug 2022 – Now

Leading the design and development of the software Asset Integrity Hub (AIH). Using AIH, Vestas achieved a saving equivalent to \$28,000 per wind farm annually in their service business. ZFs spare-part service reduced the time allocated to data engineering by 75% (3 full time employees). We did this by building a user focused software that reduced the time spent on failure management, maintenance execution and analytics. Enhanced organizational data integrity was realized by aligning the software's data models with industry standards like ISO/IEC 81346-10:2022.

Managed a team of 25 IT professionals in Armenia instilling a culture of ownership throughout the product lifecycle to minimize handoff cost and to encourage the sense of responsibility.

Engineered a series of operational solution for our customer. For example, a high-capacity event-based integration between AIH and SAP, handling over 5 million requests daily.

Bridging the gap between the end-user's and the technical product teams I initiated new product functionality by using my domain knowledge and technical abilities to design, develop and validate prototypes minimizing the time from idea to finished feature.

Solution Owner and Software Engineer

ZEVIT | Aug 2021 – Aug 2022

Led a central project for Vattenfall that materialized into a knowledge register used by over 1000 engineers. The register was built to create more intelligent maintenance plans that utilizes the operational data coming from technicians, SCADA systems and asset failures.

Designed and implemented a robust microservice architecture, enabling the seamless deployment of analytical models and real-time asset monitoring, accessible to both technical and non-technical users.

Cloud Developer

ZEVIT | 2021

Consultant

Nerve Smart System | 2018

EDUCATION

MSc in Human-Centered Artificial Intelligence

Technical University of Denmark | 2021

Advanced the precision of predictive ML algorithms by developing synthetic data augmentation techniques using generative AI, which improved model accuracy by 2% on benchmark data sets. Recognized for contributions to the field by industry peers at NVIDIA.

BSc in Design and Innovation

Technical University of Denmark | 2019

Published research on assessing mental load in robot operation using eye-tracking, in a peer-reviewed journal.

KEY SKILLS

Soft Skills Fast Prototyping, Design-Thinking, Wireframing, Workshop Facilitation

Hard Skills Data Analysis, Data Visualization, Postgress, Open Search, Deep Learning Architecture Design, Predictive models, RDS-PP/PS.

Programming Languages

Python, C#

Systems and Platforms

SAP, Kubernetes, Azure, DevOps, Figma, Docker

Languages

Danish (fluent), English (fluent), Swedish (conversational)

Publications

Zhang, Guangtao, et al. "Saccade response testing during teleoperations with a head-mounted display." *Cognition, Technology & Work* (2024).

Hansen, Sebastian, et al. *Data-Driven Failure Diagnostics of Industrial Assets* (2021)