



Svend Erik Andersen

Mechanical Engineer

4. February 1993

Herning, Denmark

SVEA Engineering

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Social Network

[linkedin.svea.me](https://www.linkedin.com/company/svea-engineering)

github.com/SV3A

Core Skills

- Dynamics and Vibrations
- Modal analysis
- Simulation
- Programming
- Linux & Unix
- Experimental work

Languages

Danish (C2)



English (C2)



German (B1)



French (A2)



Polish (A1)



Based on personal evaluation according to the **CEFR** system.

March 7, 2024

Working Experience

- 11/23 – **Magnetic Bearing Specialist (consultant)** Qnetic Corporation
now Design of active magnetic bearings for Flywheel Energy Storage system. Results count a software to simulate a rotor suspended in actively controlled magnetic bearings.
- 09/22– **System Engineer (contract)** Siemens Gamesa Renewable Energy
11/23 Solution Owner of Sensors and Actuators on the SG4X HNCF platform. Technical Project Manager for blade-load sensors and the rotor imbalance estimation feature.
- 06/21– **Software Engineer** Hemonto A/S
09/22 Creating a new financial platform (C# and Azure cloud) for portfolio- reconciliation and consolidation. Assigned responsibility for integrating and providing consultancy for a large client with special needs.
- 09/20– **Technical Development Engineer** Fritz Schur Energy A/S
06/21 Writing and maintaining software for controlling hydraulic blade pitch systems for wind turbines. Assigned technical responsibility for software, sensors, and electrical motors.
- Mar – **Research Assistant** DTU Mechanical Engineering
Sep '20 Working with rotordynamics and control of active magnetic bearing systems as a consultancy for an external private company.
- 05/17– **Engineer (Student Assistant)** byACRE
01/19 Hands-on R&D, CAD, product optimization, procurement, production and process improvements.
- Feb – **Mechanical Engineer Intern** LINAK A/S
Jul '16 Optimization of a high-volume product, root cause analysis of a failing product, CAD work and experimental work.

Education

- 2017 – **Master's degree** DTU
2019 Mechanical Engineering (GPA: 10.1).
Master Thesis Analytical and Numerical Modelling of Contact Forces in Rotordynamics with Experimental Verification.
- 2014 – **BEng. degree** DTU
2017 Mechanical Engineering (GPA: 8.4).
Bachelor Thesis Experimental Characterisation of Backup Bearings Considering Lateral Rotordynamics - Application to Flywheels for Energy Storage.
- 2010 – **Upper Secondary School (STX)** Herning Gymnasium
2013 Foreign languages - with additional subjects in the fields of the natural- and social sciences (GPA: 10.9).

Competences

- Dynamics** I've specialized in vibrations and rotordynamics at DTU.
- Applied Mathematics** I've worked with numerical analysis, e.g. FEM, and simulation of dynamical systems, e.g. impacting bodies.
- R&D** I've gained experience designing new electro-mechanical systems and solutions the last 6 years (part- and full time)

Tools & Technologies

- Software** Ansys, LabVIEW, SolidWorks/Creo, Maple, \LaTeX .
- Programming** Python 3, C/C++, C#, MATLAB/Simulink, JS, Fortran, PLC (ST), Bash, Web stack, SQL, MongoDB.
- Tech & tools** OOP, Git, Node, Docker, Azure cloud, ReactJS, MPI/OpenMP, info sec.

Publications

Contact Dynamics Between Flexible Rotors and Compliant Stators

Svend E. Andersen, Andreas W. Aspe, Frederik E. Wagner, Ilmar F. Santos (Unpublished manuscript)

Profile

I'm an engineer with a broad skillset who like to work in the cross-field between mechanics, electronics and software. I'm persistent and motivated by challenging tasks. I'm used to work on novel problems, e.g. from my time in the research group of Prof. Ilmar Santos at DTU. While having a strong theoretical foundation, I understand the important practical perspectives, and have a flair for working hands-on and in collaboration with others.