Mobil: 29293610
melund@gmail.com
GitHub.com/melund

MORTEN ENEMARK LUND

SENIOR ENGINEER – DEVELOPER EXPERIENCE

SKILLS

LANGUAGES

Python • C/C++ • AnyScript • + knowledge of many other languages

PLATFORM & DEVOPS

Git/GitHub/Azure DevOps • Azure Pipelines • GitHub Actions • CI/CD Architecture • Repository Governance • Inno Setup Packaging

DEVEX & TOOLING

Developer Portals (Sphinx) • Custom Sphinx Extensions • Pytest Plugins • Documentation Automation • VS Code extensions • Test Harness Design

PRACTICES

Agile / Scrum • Automated Testing • Secure Workflow Enablement • Open Source Collaboration • Developer Experience Optimization

DOMAIN

Biomechanical Modeling • Multibody Dynamics • Scientific Tooling

EDUCATION

AALBORG UNIVERSITY

MSc in Biomedical Engineering

Medical signals and systems
Graduated: June 2008
Aalborg, DK

AWARDS

- Oticon scholarship (100.000 kr), for Master Thesis 2007

SUMMARY

Senior Engineer specializing in Developer Experience & Platform Engineering with 10+ years improving source control, build & release automation, test infrastructure, and documentation for modeling and scientific software.

Led multi-stage Git platform evolution (Bitbucket/Jira → GitLab → Azure DevOps Server + GitHub) and SVN→Git migration, standardizing branching and onboarding across numerous large repositories. Architected unified Azure Pipelines + GitHub Actions CI/CD reducing release cycle from multi-day manual steps to ~25 minutes end-to-end. Designed Sphinx extensions, pytest plugins, and automated installer pipelines to enhance quality, security, and self-service developer workflows. Strong collaborator across product, infrastructure, and open source communities (Snakemake, conda-forge, Xonsh).

WORK EXPERIENCE

ANYBODY TECHNOLOGY A/S — *Aalborg, DK*

Application Engineer (Aug 2014 - Present)

- Orchestrated our Git platform journey over many years (Bitbucket/Jira → GitLab → Azure DevOps Server / GitHub), handled migration plans, branching policies, and onboarding across multiple large active repositories.
- Architected unified CI/CD platform (Azure Pipelines + GitHub Actions) consolidating builds for C++, Python tooling, and docs; automated artifact + installer assembly reducing release cycle from days to just 25 minutes (commit→installer).
- Developed custom pytest plugin suite for model verification tests, integrating automated quality & regression checks into pipelines (developer feedback acceleration).
- Created multiple internal documentation portals with Sphinx + custom extensions & Pygments lexer generating manuals for AnyScript language & models.
- Modernized installer delivery with automated Inno Setup pipeline reducing manual release effort and improving upgrade reliability.
- Implemented repo & workflow tooling emphasizing security, consistency, and testability; championed developer experience improvements across teams.
- Built and nurtured external & internal user community (AnyBody Manage Model Repository (AMMR), training/webcasts, self-hosted realtime support channels with discourse forums) driving adoption & contribution.

MATERIALS AND PRODUCTION, AAU *Aalborg, DK*
PhD Researcher (August 2019 – 2014)

- Research and development of biomechanical models for simulating human movement and interaction with the environment.
- Research into ways of validating biomechanical models.

TKS A/S *Aalborg, DK*
Consultant - R&D Engineer (2009)

- Embedded software development controlling wheelchairs with inter-oral devices.
- ISO 13485 compliance and documentation for medical devices.

HEALTH SCIENCE AND TECHNOLOGY, AAU *Aalborg, DK*
Research Assistant (April 2008 – Aug 2009)

- Embedded Software development.
- Control of wheelchairs with inter-oral devices.

MATHEMATICAL SCIENCES, AAU *Aalborg, DK*
Teaching Assistant (Aug 2008 – Aug 2010)

- Assistant teacher in mathematics for first year mathematics students.

MERMAID CARE A/S *Aalborg, DK*
Engineering Trainee (Aug 2007 – Jan 2008)

- Research and Development of medical equipment
- Standards and regulations (ISO 60601-1)
- Quality Management (ISO 13485)

OPEN SOURCE PROJECTS

Selection of open source prjects I have contributed to. For a full list of contributions, see my GitHub profile: [GitHub.com/melund](https://www.github.com/melund).

ANYPYTOOLS *Python*
Maintainer

- A Python package for automating and extending the AnyBody Modeling System.

SNAKEMAKE *Python*
co-maintainer

- A workflow management system that for reproducible and scalable data analyses. Highly used within the field of bioinformatics, and ran sequencing pipelines during the corona pandemic in many countries.
- Main contribution: porting the system to also work on Windows systems.

VSCODE-ANYSCRIPT *TypeScript*
Maintainer

- An extension for Visual Studio Code that provides support for the AnyScript modeling language. Including syntax highlighting.

CONDA-FORGE

Package maintainer

- Maintains package distributions for multiple packages on conda-forge: AnyBodyCon, pydeo, pymeasure, sphinx-data-viewer, sphinx-needs, sphinx-simplepdf

XONSH *Python*

Core-developer (retired)

- A Python-powered, cross-platform, Unix-gazing shell language and command prompt. 9K stars on GitHub. Top 10 trending project on GitHub in 2020.
- Architected the use of Xonsh on Windows and integration with the windows command prompt.

ACADEMIC PUBLICATIONS

Published 20+ peer-reviewed papers (Scopus h-index: 13).Representative works: Validation of multibody musculoskeletal models (2012); AnyPyTools reproducible modeling tooling (JOSS, 2019); AMMR managed model repository (Zenodo, 2025). For a full list see Google Scholar