



Maurits Silvis

Software Engineer | Mechanical Engineer | Computational Scientist | PhD

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👤 About

As a software engineer with a background in mechanical engineering, computational science and physics, I love solving complex problems using code.

Previously, I worked as a software engineer at beQualified, where I developed, maintained and tested a Java-based test automation framework for web applications. Before, I obtained a PhD in mechanical engineering, for which I improved the accuracy and fidelity of numerical predictions of turbulent fluid flows.

Moving forward, I would like to contribute to creating high-quality software for solving technological challenges. Therefore, I am currently looking for a position as a software engineer for high-tech, deep-tech or engineering applications.

📁 Experience

beQualified GmbH

Frankfurt, Germany / Remote

2020/02 – 2022/03

Software Engineer

2020/10 – 2022/03

Used Java to develop, maintain and test a test automation framework for web applications.

Scrum Master / Product Owner

2021/08 – 2022/03

Organized, prepared and led scrum meetings. Planned the implementation of new features.

Test Automation Engineer

2020/04 – 2021/02

Created, maintained and executed automated tests for a customer's web application using Cucumber, Selenium WebDriver and Java.

Front-End Web Developer

2020/02 – 2020/04

Created a single-page web application using React and TypeScript.

Skills Java · JUnit · Selenium WebDriver · Cucumber · Gherkin · Python · HTML · CSS · Bootstrap · SCSS · JavaScript · React · TypeScript

Tools Git · GitLab · Bash · Jira · IntelliJ IDEA · Maven · Jenkins · BrowserStack · ReportPortal · Visual Studio Code · Node.js

University of Groningen

Groningen, The Netherlands

2013/09 – 2020/10

PhD, Mechanical Engineering

- Conducted scientific research in the field of computational fluid dynamics, at the interface of mathematics, physics and engineering.

- Maintained, extended and created fluid simulation software using Fortran and MATLAB.
- Performed numerical simulations of turbulent fluid flows on high-performance computing clusters.
- Published 5+ first-author scientific papers and presented research results during 10+ international meetings.

Transferable skills Project management · Writing · Presenting · Supervising · Teaching · Science communication

Technical skills MATLAB · Fortran · Mathematica · LaTeX · C++

Tools Bash · Git · GitHub · Bitbucket

🎓 Education

University of Groningen

Groningen, The Netherlands

Doctor of Philosophy – PhD, Mechanical Engineering 2013/09 – 2020/10

Thesis Physics-based turbulence models for large-eddy simulation

Master of Science – MSc, Theoretical Physics 2010/09 – 2012/08

Thesis Signatures of exciton-phonon coupling in linear absorption spectra of molecular aggregates

Distinction Cum laude (with honor)

Bachelor of Science – BSc, Physics 2007/09 – 2010/08

Thesis A quaternion formulation of the Dirac equation

Distinction Cum laude (with honor)

★ Certificates

Java Core / Java Developer

JetBrains Academy

2022/10 – 2023/01

11 finished projects, 320+ studied topics, 3000+ solved problems

Introduction to Java

JetBrains Academy

2021/04 – 2022/02

6 finished projects, 100+ studied topics, 1000+ solved problems

Learn Python 3

Codecademy

2019/10 – 2020/01

13 finished projects, 15 studied topics, 12 completed quizzes

Programming in C/C++

University of Groningen

2016/09 – 2017/04

🗣️ Languages

Dutch · English · German