Sven **Hofman**

Utrecht, The Netherlands

Education

MSc in Computing Science

Groningen, The Netherlands

Rijksuniversiteit Groningen

September 2021 - July 2024

Graduated *summa cum laude*

- Master's program covering data science, computer architecture, high-performance computing, cryptography and information security.
- In my thesis, I presented an accessible study of the AKS algorithm, a groundbreaking primality test in computational number theory.

Pre-Master in Computing Science

Groningen, The Netherlands

Rijksuniversiteit Groningen

September 2020 - July 2021

- Pre-master program that strengthened my understanding of algorithms and data structures and further improved my knowledge of various core concepts in computer science, including computer architecture, parallel computing and object-oriented programming.

BSc in Mathematics

Groningen, The Netherlands

Rijksuniversiteit Groningen

September 2017 - July 2020

Graduated *cum laude*

- Bachelor's program with a major in algebra and analysis, including courses in statistics and numerical mathematics. The minor consisted of courses in imperative programming and algorithms and data structures.
- My thesis was cryptography related and involved studying Smart's algorithm for solving the discrete logarithm problem on anomalous elliptic curves.

Experience

Software Engineer – Backend

Amsterdam, The Netherlands

Deloitte

May 2025 - Present

- Part of the Asset Engineering team.

Research Intern

Eindhoven, The Netherlands

NXP Semiconductors

February 2023 - April 2023

- Improved the company's elliptic curve cryptography software for 32-bit ARM processors, including implementations of the elliptic curve Diffie-Hellman protocol and elliptic curve digital signature algorithm, leading to performance gains of up to 6%.
- Advanced analytical skills and teamwork abilities through discussions and collaboration with supervisors and colleagues.

Teaching Assistant

Groningen, The Netherlands

Rijksuniversiteit Groningen

September 2020 - April 2024

- Teaching assistant for the following bachelor's courses:

  BSc (Applied) Mathematics: Linear Algebra 1, Linear Algebra 2 (x2)

  BSc Computing Science: Statistics, Object-Oriented Programming, Parallel Computing, Computer Architecture (x2), Algorithms and Data Structures in C (x2), Advanced Algorithms and Data Structures (x2)

- Notable aspects of this role:
  - Led tutorials, supported lectures, and graded assignments and exams.
  - Developed teamwork, communication, and cultural awareness skills through collaboration with a diverse team.
  - Enhanced public speaking skills through regular presentations and facilitation of discussions in classes of up to 100 students.
  - Improved the ability to convey complex concepts, respond to student inquiries, and create an interactive classroom atmosphere.

Tutor

Groningen, The Netherlands

Self-employed

December 2019 - May 2020

- Mathematics tutor for a high school student.

Software Projects

iCloud+ Hide My Email Extension for Raycast

TypeScript, React, Object-Oriented Programming, CI/CD

- Developed a Raycast extension that seamlessly integrates iCloud+ Hide My Email functionality, using TypeScript and React. Overcame challenges posed by iCloud's use of the secure remote password (SRP) protocol for authentication.

TV Shows Releases Tracker

Python, REST API, MongoDB

- A Python command that interacts with the TMDB REST API to retrieve release information and uses MongoDB to store tracked TV show data.

Asteroids

Java, Maven, Unit Testing, Object-Oriented Programming, Databases

- Developed Asteroids, a multi-player space shooter game inspired by the classic Atari video game, using Maven. Contains complete unit test coverage, enhancing code quality and reliability.

PokePair

Javascript, React, REST API, HTML, CSS

- Developed a Pokémon-themed memory game to enhance web development skills, focusing on user interface design and interactivity.

Kapitza Pendulum Simulation

Python, Numerical Simulations

- A collaborative project that uses Python to model and visualize the Kapitza pendulum.

AppleScript Automations

AppleScript

- This project contains a collection of AppleScripts I wrote to streamline various tasks in my daily workflow.

Skills

Languages	Native in Dutch, Fluent in English
Programming	Experience in Java, JavaScript, React, Python, C++, HTML, CSS, NoSQL, Git, LaTeX Familiar with ARM Assembly, MATLAB, Microsoft Excel
Soft Skills	Analytical problem solver, Detail-oriented, Critical thinker, Team player, Self-aware

Extracurricular Activities

G.S.V.W. Tandje Hoger *Groningen, The Netherlands*

Member *September 2018 - August 2024*

Cycling association

G.S.P.V. de Ramenlappers *Groningen, The Netherlands*

Member *July 2022 - August 2024*

Padel association

Interests

- Interested in meditation and personal development
- Avid practitioner of sports such as weightlifting, running, cycling and squash