






Danny Nygård Hansen

Curriculum Vitae

Aarhus, Denmark 
dnhansen.github.io 
dnhansen 
dnhansen 
dannynhansen@gmail.com 

Work experience

Aarhus University » Teaching Assistant

2018–  Aarhus, Denmark

TA for undergraduate courses in the Departments of Mathematics and Computer Science at Aarhus University.

Aarhus University » Student Counsellor

2020–2021  Aarhus, Denmark

Student counsellor for mathematics, statistics and science studies. Completed the internal counselling course at Aarhus University.

Happy Voices Gospel Choir » Pianist

2014–2016  Viborg, Denmark

Pianist for amateur choir with around 50 members. Main responsibility for the accompaniment section and took part in arranging and planning our repertoire.

Freelance » Musician and music educator

2014–2016  Viborg, Denmark

Performed at church services, receptions, birthdays and other occasions. Also given piano lessons, both privately and at workshops.

Education

Aarhus University » BSc in Computer Science

2021–  Aarhus, Denmark  GPA: 11.9/12

Specialisation in theoretical computer science.

Aarhus University » BSc in Mathematics

2018–2021  Aarhus, Denmark  GPA: 11.8/12

Specialisation in mathematical physics and theoretical computer science. Completed the Mathematics Talent Track (30 ECTS).

Aarhus University » Undergraduate studies in physics

2016–2018 ♦ Aarhus, Denmark ♦ GPA: 12/12

Completed the first two years of a BSc programme in physics. Participated in the Physics Talent Track (completed 12 ECTS).

Kulturskolen Viborg » ‘Musikalsk Grundkursus’ (MGK)

2014–2016 ♦ Viborg, Denmark

Three-year advanced music course with specialisation in jazz and classical piano. Completed the course in two years receiving the top grade, and received an offer of admission from the Royal Academy of Music in Aarhus.

Viborg Katedralskole » Higher General Examination Programme (STX)

2011–2014 ♦ Viborg, Denmark ♦ GPA: 12.1/12

Danish general upper secondary education programme. Specialised study programme in music and English with electives in physics and astronomy. Self-studied upper-level mathematics. Received Knud Valdemar Iversen and wife Ellen Iversen’s grant for general proficiency.

Teaching experience

Teaching assistant (‘instruktør’) for the following courses:

- » *Computer Architecture, Networks, and Operating Systems*
Spring 2023 ♦ Department of Computer Science, Aarhus University
- » *Introduction to Programming with Scientific Applications*
Spring 2021 ♦ Department of Computer Science, Aarhus University
- » *Mathematical Analysis 2*
Spring 2020 ♦ Department of Mathematics, Aarhus University
- » *Mathematical Analysis 1*
Autumn 2019 ♦ Department of Mathematics, Aarhus University
- » *Calculus Beta*
Autumn 2020 ♦ Department of Mathematics, Aarhus University

</> Technical and computer skills

- » Software development in **Java**. Test-driven development, compositional design, and design patterns.
- » Computer architecture. Programming in **C** and **x86 assembly**. Basic knowledge of operating systems, in particular **Unix**.
- » Concurrent and distributed (network) programming in **C**, **Java** and **Go**.

- » Scientific and statistical programming in **Python** and **R**.
- » Functional programming in **Haskell**, **Scala**, **F#** and **Racket**.
- » Theoretical computer science: Algorithms and data structures, programming language theory, computability and logic.
- » Experience with database systems and data modelling, in particular relational databases and **SQL**, concurrency control and recovery. Basic knowledge of data mining.

For more details see my [GitHub page](#) and a [complete list of university coursework](#).

Language skills

<i>Danish</i>	Native proficiency
<i>English</i>	Full professional proficiency
<i>German</i>	Limited working proficiency

Hobbies and interests

Outside of mathematics and computer science, music is my favourite pastime. I play the piano and guitar, and I sing in the Musicology Students' Choir at Aarhus University where I also volunteer as treasurer.

I also enjoy going for a run in the forest or reading a good book (I'm currently reading Robertson Davies' *Fifth Business*).