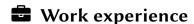
Danny Nygård Hansen

Curriculum Vitae



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.

m Education

Aarhus University » BSc in Computer Science

2021- ♦ Aarhus, Denmark ♦ GPA: 11.9/12

Specialisation in theoretical computer science.

Aarhus University » BSc in Mathematics

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

Aarhus University » Undergraduate studies in physics

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)

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)

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 ('instruktor') 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 2018 ⋄ Department of Mathematics, Aarhus University

Volunteering

Musicology Students' Choir » Treasurer

2019-2023 Aarhus, Denmark

Board member and treasurer for the Musicology Students' Choir at Aarhus University. Overseen the financial and legal responsibilities of the choir. Implemented major changes to the articles of the association to ensure fairness and transparency.

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

Danish Native proficiency

English Full professional proficiencyGerman 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.

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