Computer Science research at AU covers a wide range of theoretical and experimental areas:

**Algorithms and data structures** – with a particular focus on I/O-efficient algorithms and algorithm engineering for massive data sets.

**Bioinformatics** – developing algorithms for analysis of large biological data sets, such as string and pattern recognition algorithms.

**Computer graphics and image processing** – including physically based simulation of surfaces and fluids, biomedical simulation and visualization.

**Computer mediated activity** – development of new interaction techniques, methods and theories for computer-mediated activities of work and everyday life.

**Cryptography and security** – in particular, public-key cryptography, cryptographic protocols, and quantum cryptography.

**Data-intensive systems** – topics related to spatio-temporal data management, query processing and indexing, high dimensional and multimedia data, and infrastructure for mobile services and cloud computing.

**Logic and Semantics** – semantics of programming languages and type theories, models and logics for reasoning about programs.

**Mathematical computer science** – covering topics such as computational complexity theory, algorithmic and computational game theory, mathematical programming and combinatorial optimization.

**Programming languages** – focusing on object-oriented and functional programming, web technologies, and specification, verification, testing and analysis of software.

**Ubiquitous computing and interaction** – creating concepts for future interactive spaces at schools, libraries, museums, homes and workplaces.

**Use, design and innovation** – including participatory design in innovation processes.

**PHD IN AARHUS**

The PhD programs at Department of Computer Science at Aarhus University are affiliated with the Graduate School of Science and Technology.

---

**About the application procedure and PhD study**
- [cs.au.dk/phd](http://cs.au.dk/phd)

**About living and working in Denmark**
- [au.dk/ias](http://au.dk/ias)

**About the PhD society at AU**
- [phd.au.dk/phdhouse](http://phd.au.dk/phdhouse)

---

**Department of Computer Science, Aarhus University**

Aabogade 34
8200 Aarhus N
Denmark

Email: cs@au.dk
cs.au.dk

Phone: +45 8715 4112
FLEXIBLE PROGRAMS

As a PhD student at Aarhus University you will be part of a dynamic research environment. The university has more than 2,500 doctoral and post-doctoral students and approximately 2,000 senior researchers, lecturers and professors.

The PhD House at Aarhus University aspires to create a dynamic, academic and social environment for the university’s young research talents, and is a meeting place for the many international PhD students at Aarhus University.

PhD students are enrolled and employed for 3 to 5 years in the PhD programme. For example you can enroll the PhD program right after obtaining your bachelor degree.

Highly competitive PhD stipends with tuition included makes Denmark a very attractive place to obtain your PhD degree.

We encourage you to take a look at our research web pages, at cs.au.dk/research and in case you have specific questions about pursuing a PhD within a particular research area, please feel free to contact the faculty members within the research group.

Kasper Green Larsen, PhD student

*One of the greatest strengths in Aarhus is the large research groups. You can always go down the hall and find the first ten people to collaborate and discuss ideas with. This provides a very vibrant and inspiring research environment, whose equal I have not seen elsewhere.