ABOUT THE DEPARTMENT OF COMPUTER SCIENCE (DIKU)

The Department of Computer Science at University of Copenhagen (DIKU) was established in 1970 and was the first of its kind in Denmark. The department is internationally recognized for its outstanding research comprised in its three sections:

- Algorithms and Programming Languages (APL)
- Human Centred Computing (HCC)
- Medical Imaging and Machine Learning (Image).

Visiting addresses:
DIKU is situated at three locations on North Campus and one on South Campus
North Campus: Universitetsparken 1 and 5 and Sigurdsgade 41, DK-2100 Copenhagen Ø
South Campus: Njalsgade 128-132, Building 24, 5th Floor, DK-2300 Copenhagen S.

No. of staff: 100
No. of students: 800 Computer Science students, 275 Communication and IT students, and 200 IT and Health students
Annual turnover: 80m DKK equaling 12m USD
Webpage: diku.dk/english
Facebook: facebook.com/DIKU.UCPH

UNIVERSITY OF COPENHAGEN
DEPARTMENT OF COMPUTER SCIENCE

Research highlight
The Image Section
THE IMAGE SECTION

The Image section hosts experts in image analysis & processing, computer vision, computer simulation, numerical optimization, information retrieval, data science and machine learning. Their research ranges from theoretical analyses, over algorithm development, to solving concrete problems for science, industry, and society. More info: diku.dk/Image

Computer Vision

Computer vision is concerned with the automated analysis of still images and videos. We focus on development of fundamental algorithms as well as applications of these to industrial and real-life problems. More info: diku.dk/Computervision

Machine Learning

The Machine Learning Lab develops, analyses, and applies algorithms for machine learning and data mining. Our goal is to increase the autonomy and scalability of adaptive systems by using concepts from theoretical and applied computer science as well as statistics, optimization and applied mathematics. We love demonstrating the power of our methods by solving concrete problems in science and society. More info: diku.dk/ML

Mathematical Image Analysis

This lab has its focus on modeling and numerical methods for nonlinear statistics, variational problems, and geometry on manifolds and metric spaces. Application areas include 3D tomographic reconstruction, airway trees, brain image and morphological analysis, and functional analysis of imaging data. More info: diku.dk/math-image

Numerical Optimization and Computer Simulation Lab

The team associated with the Numerical Optimization and Computer Simulation Lab is doing basic research in numerical methods, computational mechanics and computational physics with applications in robotics, computer games, visualization and biomechanical modeling. More info: diku.dk/simulation-center

BioImaging

Bioimaging refers to tools used to create and study structural or functional images of living objects or systems, e.g. tomographical reconstruction of protein structures from cryo-electron microscope images; estimating the density of synaptic vesicles in the brain of rats; or modeling nano-domains on plant surfaces. More info: diku.dk/bioimaging

Medical Imaging

The Medical Image Analysis Lab is concerned with the analysis of images for medical purposes. The major applications are neuroimaging, breast cancer screening and pulmonary images. The lab is focused on the quantification of pathological changes through medical imaging biomarkers. More info: diku.dk/medical-imaging

Information Retrieval

The Information Retrieval Lab conducts research in the areas of information retrieval (e.g. search engines) and information extraction. We study and develop tools that provide effective and efficient access to big, heterogeneous data. More info: diku.dk/information-retrieval