

Bachelor projects in Algorithms

A typical BSc project (and MSc thesis) consists of

- reading and **understanding in depth** one or more **research papers**
- getting an overview of **related** results in the **literature**
- **implementing** one or more algorithms / data structures
- **experimental evaluation** of the implementation
- writing a **report** summarizing all the above, incl. rephrasing central theory

Depending on ambition of the project group and the progress during semester

- technical complexity of algorithms considered
- balance between theory / implementation / experimental evaluation
- confirm known experiments / first implementation / novel research
- project description adjusted based on progress

Courses	BSc	Algorithms and Data Structures (CS, 1 st semester, Brodal)
		Computer Architecture, Networks and Operating Systems (CS & IT 4 th semester, Afshani)
		Machine Learning (CS, 5 th semester, Larsen)
		Introduction to Programming with Scientific Applications (non-CS, Brodal)
	MSc	Computational Geometry: Theory and Experimentation (CS, 1 st semester, Afshani / Arge)
		Randomized Algorithms (CS, 2 nd semester, Larsen)
		Cluster Analysis (CS, 2 nd semester, Schwiegelshohn)



Peyman Afshani
associate professor
Computational geometry
External memory algorithms



Gerth Stølting Brodal
professor
Data structures
External memory algorithms



Kasper Green Larsen
associate professor
Data structures
Lower bounds



Chris Schwiegelshohn
assistant professor
Machine learning
Dimension reduction