

# Professortiltrædelse: Inge Li Gørtz

**Title:** Combinatorial Pattern Matching

## **Abstract:**

Modern society generates huge amounts of digital information in science, industry, and business. Much of this information is sequential or structured data, i.e., internet pages, biological data, time-series data, graphs, etc. Combinatorial pattern matching is the study of algorithms for efficiently processing and manipulating such data. My recent research explores efficient algorithms in this area for searching and indexing data. In this talk, I will give an overview of some of the key ideas and challenges in the area and highlight recent results.

Another part of my research concerns approximation algorithms for vehicle routing problems. Many vehicle routing problems are known to be NP-complete, but instead of solving the problem optimally, we can efficiently compute solutions that are within a small factor from the optimal solution.

I will also touch upon my research within this area in my talk.