Associate Professorship of Coding and Cryptography
TUM Department of Electrical and Computer Engineering
Technical University of Munich

TUM

Master's Thesis, Forschungspraxis

Error correction for DNA storage

DNA-based data storage is a novel approach for long term digital data archiving.

Due to the unique nature of writing and reading DNA, the channel associated with these processes is still relatively poorly understood and varies over different synthesis (writing) and sequencing (reading) technologies. The task of the student is to evaluate various decoding strategies for certain error-correcting schemes tailored for the DNA storage channel.

Prerequisites

- Basic principles of stochastic and algebra
- Channel Coding
- Information Theory

Advisors

Anisha Banerjee