

Master's Thesis

DNA Storage Channel Modeling and Error Correction

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

Due to the unique nature of writing and reading DNA, the channel associated with these processes is still relatively poor understood and varies over different synthesis (writing) and sequencing (reading) technologies. The task of the student is to analyze different sequencing methods and the associated errors and formulate associated channel models. Based on these models, error-correcting schemes shall be evaluated.

Prerequisites

- Basic principles of stochastic and algebra
- Channel Coding

Advisors

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