

## **Abstract**

Currently, it is not difficult to obtain genomic data even from non-model organisms. These data can give us information about the demographic history of populations. Many statistical inference methods have been developed to infer the demographic history of populations from genomic data, which I describe in this bachelor thesis. At first, I introduce the reader to important concepts in analyzing the demographic history of populations. I then describe the different types of genomic data that can be used to infer the demographic history of populations. Next, I discuss statistical methods, which include methods based on site frequency spectrum data, methods using approximate Bayesian computation, methods for determining identity, and sequential Markov coalescent methods. I provide a basic overview of the theory and logic of each approach. I then present procedures for selecting inference methods.

**Keywords:** population genetics, demographic inference, statistical inference, whole genome data