### Constructive Formalization of Regular Languages

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### Chapter 1

### Introduction

Regular languages are a well-studied class of formal languages. We will prove the equivalence of three well-known characterizations of regular languages: regular expressions, finite automata and the characterization given by Myhill-Nerode theorem.

#### 1.1 Recent work

There have been many publications on regular languages in recent years. Many of them investigate decidability of equivalence of regular languages, though there have also been new equivalence proofs regarding different characterizations of regular languages.

History

Theoretical importance

Practical importance?

## Chapter 2

# Conclusion

## Chapter 3

# References