# UNIVERSITY OF ZAGREB FACULTY ELECTRICAL ENGINEERING AND COMPUTING

MASTER THESIS nu. 1382

# Image Based Phylogenetic Classification

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Thank you...

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### 1. Introduction

Since the dawn of time, people have tried to explain their surroundings. Life is all around us in many forms, and as such people have tried to categorize t by keen observation, both through its visual and genetic features. Today, it is organised into a taxonomic hierarchy of eight major taxonomic ranks. The number of known species on Earth is in the millions and climbing every year.

Machine learning allows computers the ability to learn without being explicitly programmed (Samuel). It, together with an incrase in data

### 2. Research context

Papers please.

### 2.1. Definitions and notation

Matrix is..

### 2.2. Machine learning

### 2.3. Deep learning

**GPUs** 

#### 2.3.1. Feedforward Neural Networks

#### 2.3.2. Convolutional Neural Networks

### 3. TaxNet

Let's hope it is anygood.

# 4. Results

Graphs graphs graphs...

# 5. Conclusion

Zaključak.

### **B**IBLIOGRAPHY

A. L. Samuel. Some studies in machine learning using the game of checkers. 3(3): 210–229. ISSN 0018-8646. doi: 10.1147/rd.33.0210.

### **Image Based Phylogenetic Classification**

#### Sažetak

Sažetak na hrvatskom jeziku.

Ključne riječi: Ključne riječi, odvojene zarezima.

#### Title

#### Abstract

Abstract.

**Keywords:** Keywords.