

# CSE326: Software Engineering

## Final Project Proposal

Cole Johnson - cole.johnson@student.nmt.edu  
Lauren Giles - lauren.giles@student.nmt.edu  
Colin Grandjean - colin.grandjean@student.nmt.edu  
John Runyon - john.runyon@student.nmt.edu

February 2, 2025

### Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Project Overview and Statement of Proposal . . . . .	2
1.2	Project Scope and Objectives . . . . .	2
<b>2</b>	<b>Risk Management Strategy</b>	<b>2</b>
2.1	Risk Table . . . . .	2
2.2	Discussion of Risks to Be Managed . . . . .	2
2.3	Risk Mitigation, Monitoring, and Management Plan . . . . .	2
2.3.1	Risk Mitigation . . . . .	2

### 1 Introduction

#### 1.1 Project Overview and Statement of Proposal

OCR (Optical Character Recognition) is a technique where an machine attempts to parse images, or a stream of images, into a matched set of some written alphabet—often just a set of alphanumeric characters. OCR is used in banking, note taking applications, and many other services on a daily basis. One of the most common

implementations of OCR is the use of neural networks, often through supervised learning methods. We propose to create a simple neural network that will be trained and tested to classify a single image into an alphanumeric character.

## **1.2 Project Scope and Objectives**

The initial scope of the project is the create a simple Optical Character Recognition using a neural network using supervised learning techniques to test and train our model.

# **2 Risk Management Strategy**

## **2.1 Risk Table**

<b>Risks</b>	<b>Category</b>	<b>Probability</b>	<b>Impact</b>	<b>RMMM</b>
a	b	c	d	e

## **2.2 Discussion of Risks to Be Managed**

## **2.3 Risk Mitigation, Monitoring, and Management Plan**

### **2.3.1 Risk Mitigation**