CSE326: Software Engineering
Final Project Proposal

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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 (OCR) system using a neural network and employ supervised learning techniques to test and train our model. Our main objectives for the project include:

(a.) A training and test environment for our neural network

(b.) A graphical user interface that the user can draw characters for the model to classify them

(c.) A graphical user interface to view the created neural networks to visually see how each model works

2 Risk Management Strategy

2.1 Risk Table

Category Values

- **PS** - Product Size Risk
- **BU** Business Impact Risk
- **CU** - Customer Risk
- **PR** - Process Risk
- **TE** - Technology Risk
- **DE** - Development Environment Risk
- **ST** - Risk Associated with Staff Size and Experience

Impact Values:

- **4** - catastrophic
- **3** - critical
- **2** - marginal
- **1** - negligible

Risks	Category	Probability	Impact	RMMM
a	**ST**	Moderate	High	e

2.2 Discussion of Risks to Be Managed

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