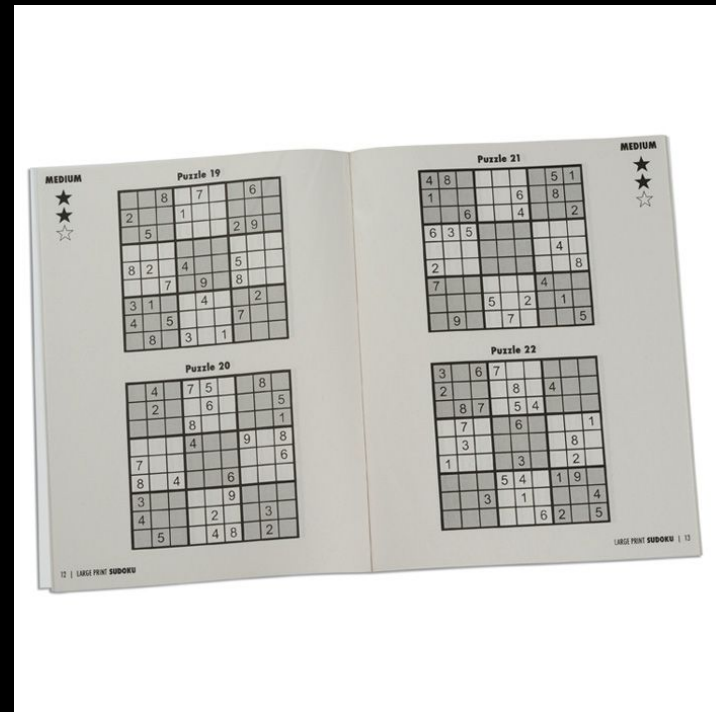# SUDOKU PUZZLE SOLVER

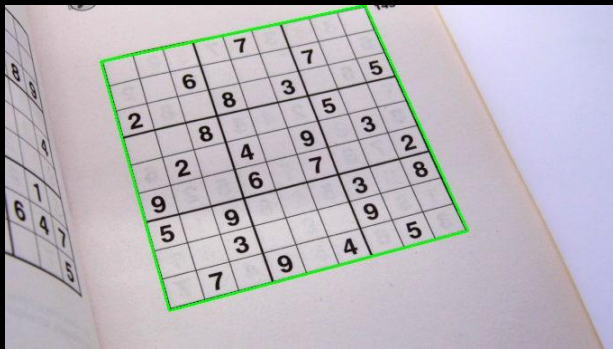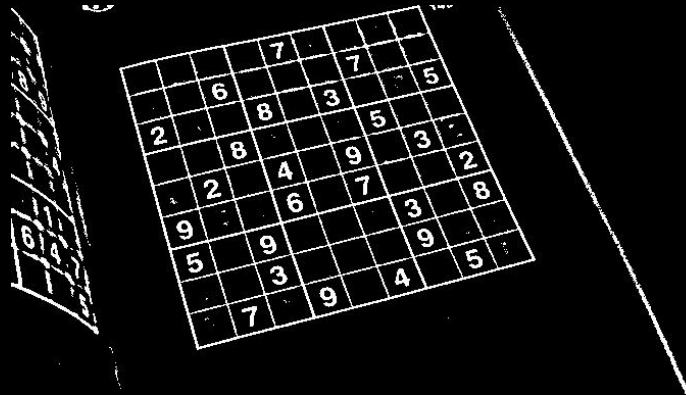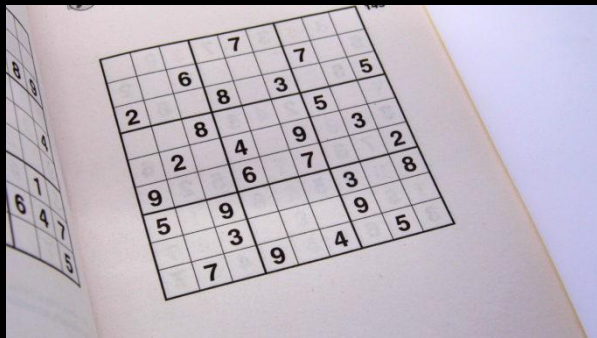## Computer Vision

Daniel Martinez

Overview

- Problem Statement
- System Pipeline
- Results and Performance
- Challenges/Improvements
- Demo

Problem Statement

- Automates solving Sudoku from a real-world image
- Combines computer vision, OCR, and logic solving
- Tests how machines interpret and act on visual data
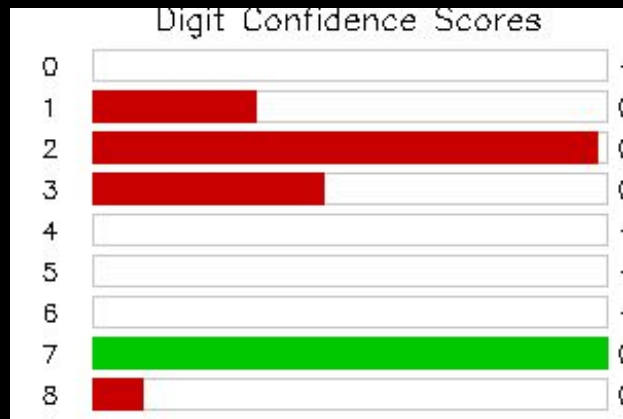- Techniques apply to broader tasks like document analysis or robotics

System Pipeline

System Pipeline

Results/ Performance

Results/Performance

Challenged and improvements

- Misclassified digits due to lighting or shape
- Grid extraction fails on skewed images
- Model training limited by data variety
- Improve CNN with more real Sudoku samples

Demo

Questions?