The Sudoku Project

WEEK 1: 24/07/2021 to 31/07/2021

Ishika De and Yashvi Donga

July 2021

Agenda

- Brief Overview
- Current Status
- Toolchain
- Difficulties
- Learnings

Brief Overview

The goal of this project is to investigate a variety of algorithms (backtracking, brute force, stochastic search, depth first search) that are capable of solving standard Sudoku puzzles, of ranging difficulties, in order to learn more about Sudoku solving techniques.

We also wanted to create the sudoku solver using OpenCV that will read a puzzle from an image and solve it.

Current Status

- Devised the action plan for next 2 months
- Used the backtracking algorithm to solve any type of sudoku grid.
- Generated solved sudokus using backtracking algorithm

Toolchain

- Languages: Python, Haskell, Elixir, C++, Java
- Open CV
- Tensorflow



Difficulties

The backtracking algorithm took some time to implement because we had few challenges implementing the recursive function.

Learnings

July 2021