AI LAKERS Markdown Cheat Sheet

Lists

Unordered List:

- Part 1: Co-authorship Graph
- Part 2: Sudoku AI Solver
- Part 3: Traffic Sign Classifier

Ordered List:

1. Load Data
2. Build Graph
3. Find Path

Links

[Markdown Guide](https://www.markdownguide.org)

Images

Code

Inline Code:

Use `pd.read_csv()` to read files.

Code Block (Python):

```python
def load_data(file):
 return pd.read_csv(file)
```

Blockquotes

> This project uses BFS to find the shortest path in a co-authorship network.

Tables

| Component | Library | Purpose |

|---|---|---|

| Co-author | pandas | Load and process CSV data |

| Sudoku | AC-3, MRV | Solve constraint satisfaction |

| Classifier | TensorFlow | CNN for image classification |

Task Lists

- [x] Load data from CSV

- [x] Build graph

- [ ] Implement GUI (optional)

Horizontal Rule

File Structure Example

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project/

part1_coauthors.py

part2_sudoku_ai.py

part3_traffic_signs.py

authors.csv

papers.csv

scientists.csv

README.md

Example Section for README.md

AI LAKERS

This project includes:

- **Part 1:** Finding the shortest co-authorship path between scientists using BFS.

- **Part 2:** Solving Sudoku puzzles using constraint satisfaction (AC-3, MRV, LCV).

- **Part 3:** Classifying traffic signs using a CNN built with TensorFlow and OpenCV.

How to Run

```bash
python part1_coauthors.py
python part2_sudoku_ai.py
python part3_traffic_signs.py gtsrb_directory [model.h5]
```

Sample Output

> "3 degrees of separation between Alan Turing and Grace Hopper."