

# AI - Lab 1

---

- 19125101
- 19CTT1
- Nguyen Truong Lam

## Check list

---

- Uniform-cost search
  - Implementation (in SOURCE/algorithms/ucs.py): Done
  - List expanded nodes (explored nodes): Done
  - List nodes on return path: Done
- Iterative deepening search
  - Implementation (in SOURCE/algorithms/ids.py): Done
  - List expanded nodes (explored nodes): Done
  - List nodes on return path: Done
- Graph-search Greedy best-first search
  - Implementation (in SOURCE/algorithms/gbfs.py): Done
  - List expanded nodes (explored nodes): Done
  - List nodes on return path: Done
- Graph-search A\*
  - Implementation (in SOURCE/algorithms/aStartSearch.py): Done
  - List expanded nodes (explored nodes): Done
  - List nodes on return path: Done

## Source structure

---

To execute whole program, run:

```
python3 main.py
```

This file will scan all input-files in folder `./INPUT/`, consequently implement `usc`, `ids`, `aStartSearch`, `gbfs` algorithms and write the coressponding out-files to folder `./OUTPUT/`

All algorithms are implemented in folder `SOURCE/algorithms/`