Deep learning

Michal CHOVANEC, PhD.

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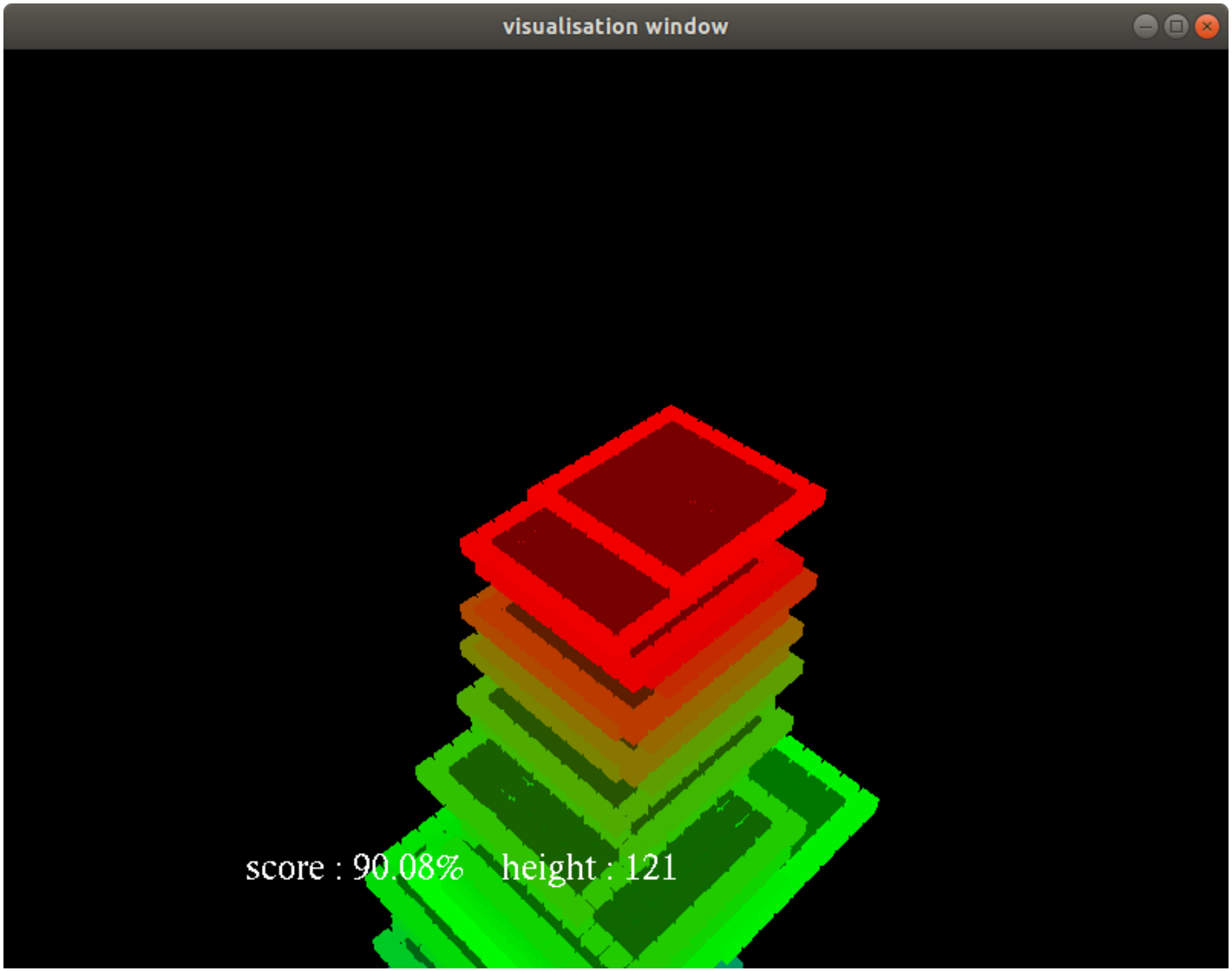
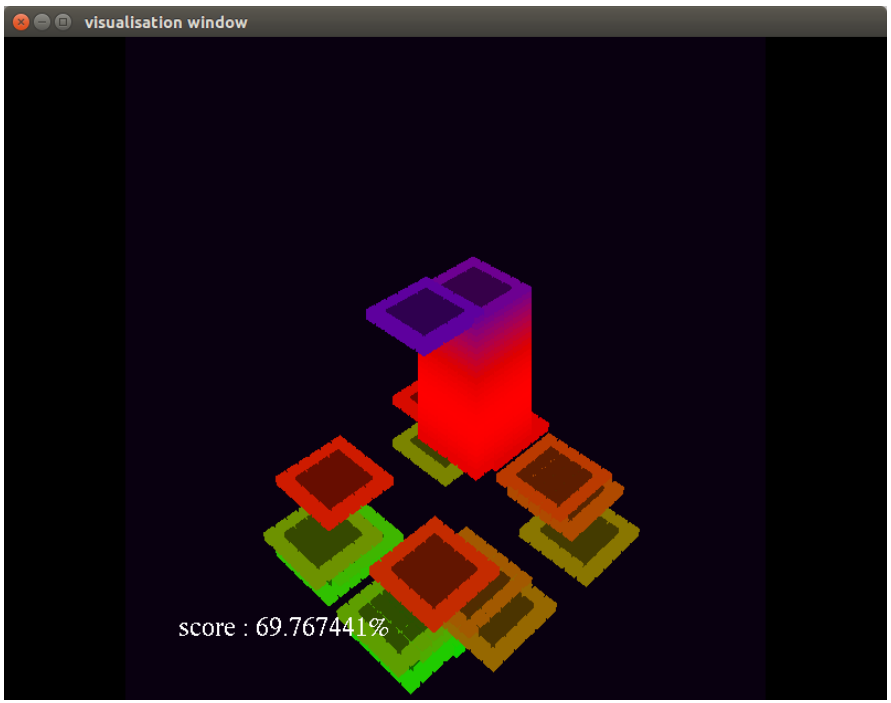
Faculty of Management Science and Informatics

Stack game

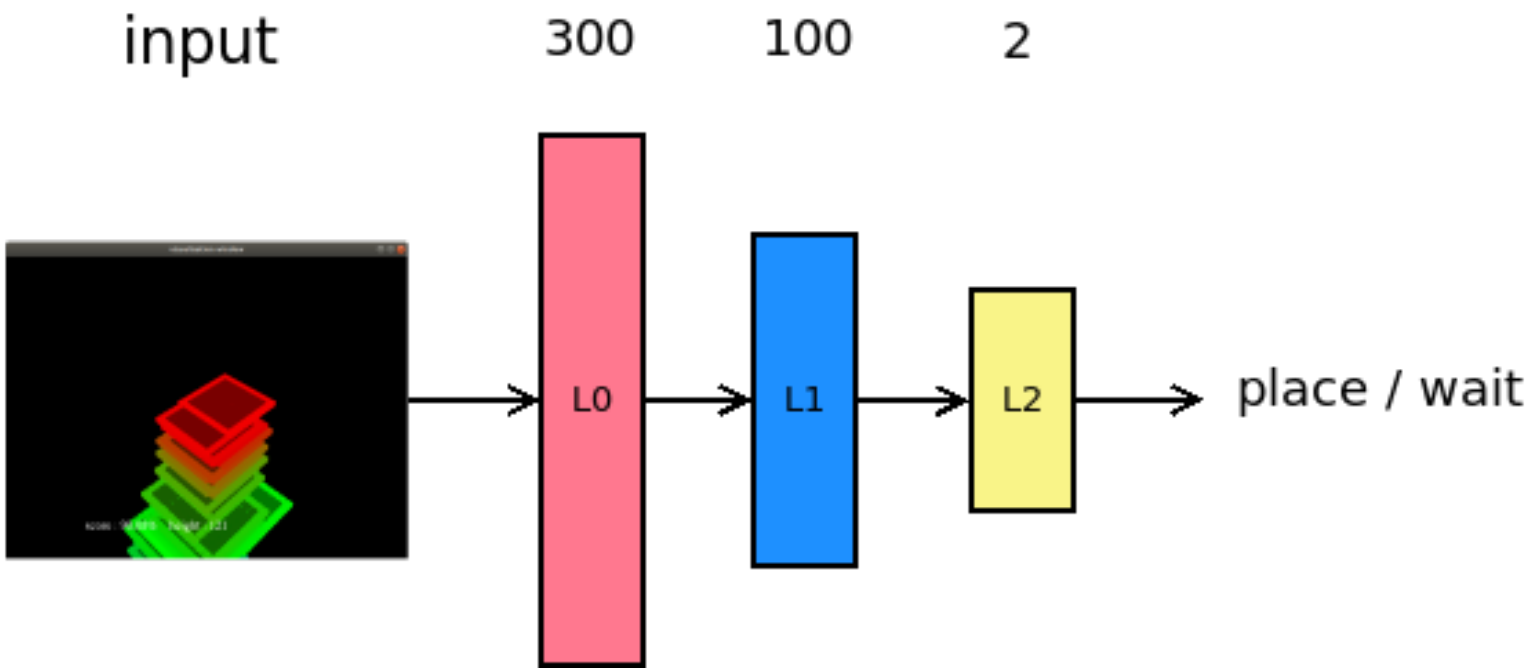


Stack game

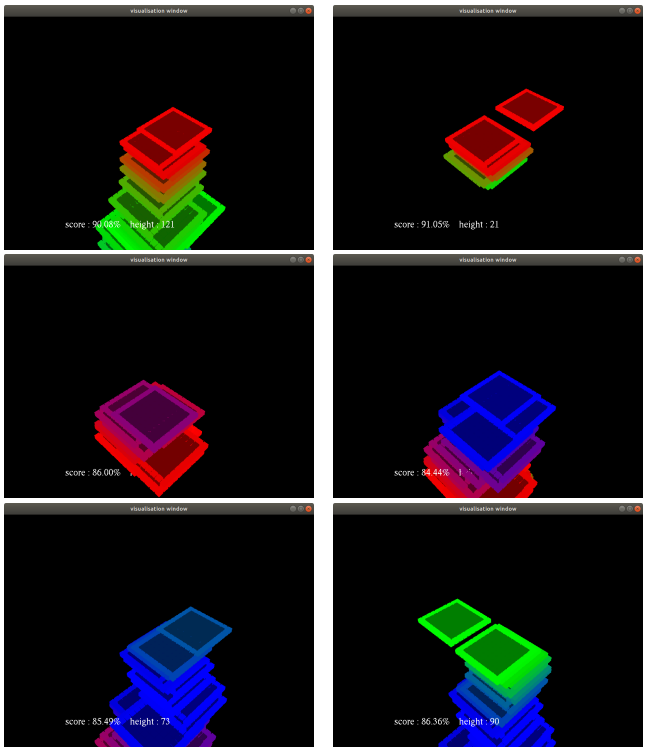


- build stack tower
- **state** : last + actual floor image [32x32x2]
- **reward** : alignment rate $\langle 0, 1 \rangle$

Neural network



Neural network, training

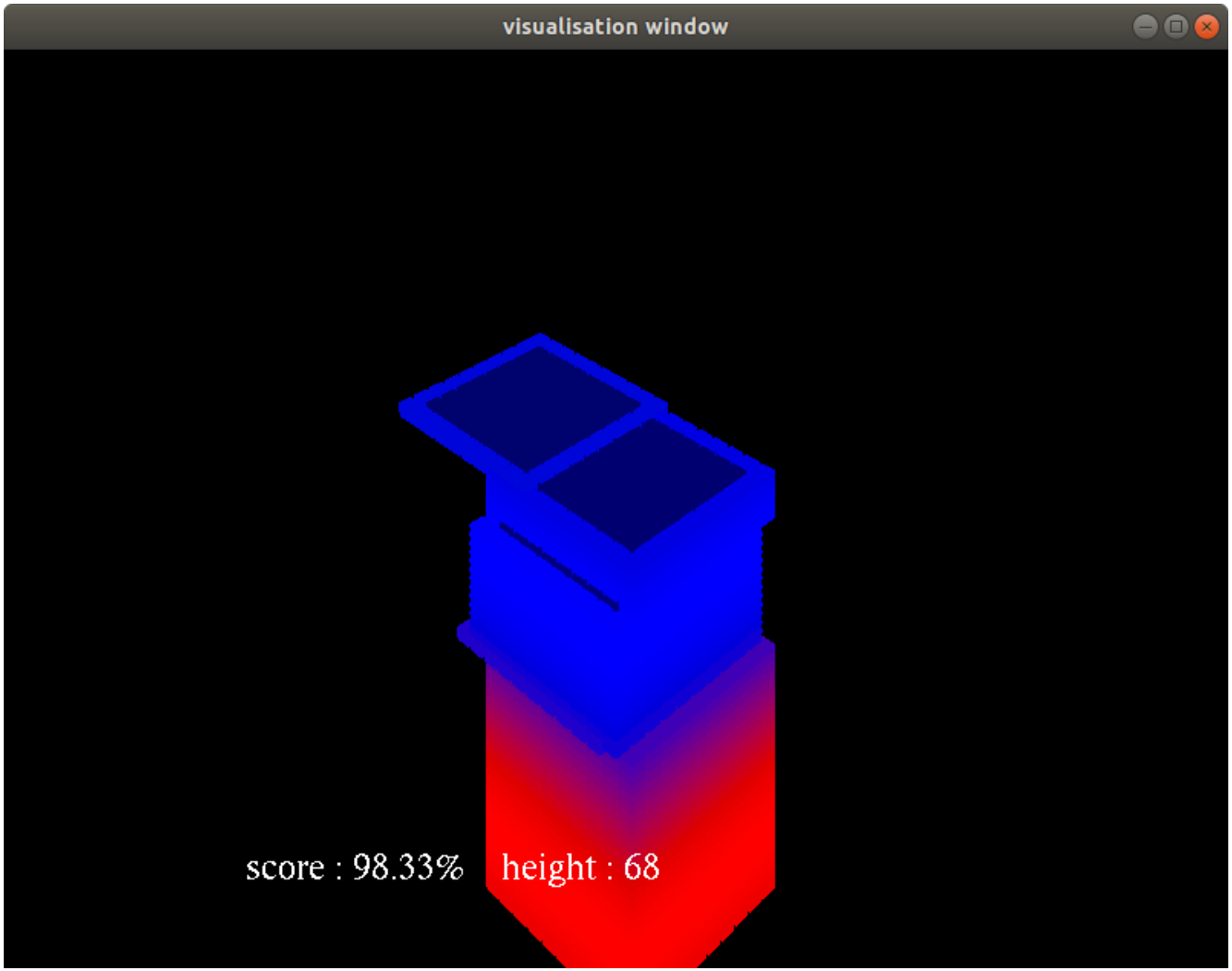


- training set
- thousands of inputs and required outputs
- **Error = required - obtained**
- learn neural network

Neural network

```
layer IO                : [  20   20    2][   1    1    1][  20   20    2][    0     0]
layer AV POOLING        : [  20   20    2][   2    2    1][  10   10    2][    0     0]
layer FC                : [   1    1  200][   1    1   64][   1    1   64][12800    64]
layer RELU              : [   1    1   64][   1    1    1][   1    1   64][    0     0]
layer FC                : [   1    1   64][   1    1    8][   1    1    8][  512     8]
layer RELU              : [   1    1    8][   1    1    1][   1    1    8][    0     0]
layer FC                : [   1    1    8][   1    1    2][   1    1    2][   16     2]
layer IO                : [   1    1    2][   1    1    1][   1    1    2][    0     0]
```

Q&A



https://github.com/michalnand/machine_learning_course

michal.nand@gmail.com