# Luuk Willemsen

## Education

2014 - 2018 B.S. Computer Engineering, UPC Barcelona Tech, Barcelona

Specializing in Computing (Theory of Computation, Algorithms, Compilers, Artificial Intelligence)

# Projects

## 2015 - 2017 Universal TV Remote - 1.5M installs

- Developed TV Remote app using the phone's built-in IR-blaster
- Reverse engineered IR codes for air conditioner signals and less well-known brands
- 2015 2017 Intruder Selfie 500K installs
  - Developed app that takes a picture when somebody fails to unlock your device
  - 2017 logsolve
    - Logic game (sudoku-like) solver using computer vision and constraint programming
    - Solves games on a phone using a capacitive pen attached to a 3D printer

## 2016 - 2017 Rubik Robot

- Self designed and 3D-printed Rubik's Cube robot solver with over 40 parts
- Iterated over 20+ designs and built solver using clustering and CV algorithms

#### 2016 Rubik Web

- Built an interactive Rubik's Cube solver for the web
- Using Three.js for rendering and custom algorithms for solving the cube

## Awards

- 2017 **Bloomberg prize** CopenHacks (*Denmark*)
- 2017 **Bosch prize** StartHack (Switzerland)
- 2016 **Microsoft prize** Junction (Finland)
- 2015 **1st prize** HackForGood (Spain)

# Programming languages

Proficient Go, Java, C, C++, JavaScript, Python

Familiar Haskell, Prolog, Shell

### Tools

Git Experienced with branches, merges, rebasing, etc

Linux Used Linux as primary OS for years (Debian, Ubuntu)

#### Skills

Teaching Member of Jedi UPC, a university teaching non-profit

Leadership Founded RobotsUPC, a university robotics non-profit

Research Member of Cosmic Research, a university space research association

Languages Fluent in English, native in Spanish and Dutch