Luuk Willemsen

Experience

Oct 2017 Backend engineer, Fyusion, Inc, San Francisco, CA

present • Improving and maintaining scalable backend systems in Go

• Designed a custom binary format with 46% better performance than general purpose compression

Aug 2017 Mobile & backend engineer, Bosch, Switzerland

Oct 2017 • Working on the connected car project of the Bosch IoT Lab

• Collecting, processing and sending in-car data and analytics on Android phones

Education

2014 - 2019 B.S. Computer Engineering, UPC Barcelona Tech, Barcelona, Spain

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

Projects

2015 - 2017 Universal TV Remote - 2M installs

- Developed Android remote control app using the phone's built-in IR-blaster
- Reverse engineered IR codes for tv and air conditioner signals of less well-known brands

2015 - 2017 Intruder Selfie - 1M installs

• Developed Android app that takes a picture when somebody fails to unlock your device

Open-source

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

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 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 & Tools

Languages Comfortable: Go, Java, C, C++, JavaScript, Python. Familiar: Haskell, Prolog, Shell

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 and projects 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