



SKILLS

PROGRAMMING:

- **C and C++** used to implement code involving robotics, networking, GUIs, computing and cybersecurity.
- Used **Unity** and **C#** to develop 3D videogames for Android and PC.
- Used **JavaScript, Flask, Python, HTML** and **CSS** to implement a Web Application for the visually impaired.

SYSTEM ADMINISTRATION

- **Google Cloud Platform, nginx** and **ModSecurity** used to host websites and web apps securely using cloud VMs.
- Used **Linux** for many hours when doing university case studies and personal projects.

CYBERSECURITY AND NETWORKING

- **Kali, nmap, ghidra, BurpSuite** and **WireShark** used in CTFs and pentesting.
- Implemented several W10 backdoors using C, Python and syscalls.
- Used **CISCO IOS** in packet tracer to set up and configure routers and networks.

OTHER SKILLS

- Basic electronics knowledge and soldering.
- Good spoken and written English.

EDUCATION

UNIVERSITAT POLITECNICA DE CATALUNYA 2018-Now

Bachelor's Degree in Informatics Engineering Student

CAMBRIDGE 2018

First Certificate in English

PROFILE

Technical computer engineer student with skills working with cybersecurity, robotics, software development and system administration. Hard working and fast at learning how to use new technologies. Experience teaching IT and Mathematics.

EXPERIENCE

ENGINEERING TUTORING Freelance

December 2018 - Present

- Teaching linear algebra, calculus, physics, hardware theory and programming online to 3 students.
- Taught lessons for Batxillerat, Informatics Engineering and Industrial Engineering students.

EXTRACURRICULARS

TAUX github.com/PolGs/TaulaMobil

- Built an auxiliary remote control table to aid handicapped people.
- Used **Arduino** and Bluetooth to control the device via smartphone.
- Functionality was accomplished but the components were too heavy

HACKUPC22 github.com/PolGs/Cognito

- Built a vibrating backpack for the visually impaired.
- Implemented using Python and JS an **STM32** and **Raspberry Pi**.
- Device was capable of detecting and notifying a human fall.

KAKUROS! github.com/PolGs/Kakuro

- Developed puzzle game using **Java** and Swing.
- Implemented algorithm that generates s Kakuros and solves them.
- Implemented GUI to play the game and even input new Kakuros.

DRIFTPOLY github.com/PolGs/DriftPoly

- Developed racing game with drift mechanics using Unity.
- Programmed car controller, vehicle customization and saves.
- Intention to publish on GPlay but I lacked funds so the project is paused.

SENSORIAL Lead Game Developer

- Developed a first-person zombie game demo in **Unity**
- Used to test sensorial chairs (SPTBCN)

Check out my projects

Portfolio:



www.polgalvez.tk

GitHub:



github.com/polgs