Joel Gottfried

Electronic engineer



PROFILE

Throughout my academic training I sought to become a well-rounded engineer, incorporating knowledge of different areas within electronics, including: embedded systems, high and low level programming, neural networks and machine learning, digital communications, FPGAs programming, signal processing, data and image processing and analysis, integrated circuit design, simulation, and robotics. I've done many projects that involve Robots, video games, electronic toys and machine learning.

CONTACT

@ joelgottfried99@gmail.com

- Portfolio
- LinkedIn

PERSONAL INFORMATION

Year of birth: 1999

Residence: CABA, Argentina Languages: Spanish (Native), English (Advanced, FCE)

SKILLS

- Firmware/Software Developer
- Hardware Developer (PCB, Testing)
- 3D Design
- Simulation (Matlab, Octave, Spice)

SOFT SKILLS

- Teamwork
- Communication
- Eager to learn new technologies
- Adaptability

EXPERIENCE

ELECTRONIC DEVELOPER at Tesacom (CABA).

Aug 2022 - today

 Development of Hardware and Firmware of IIOT products, including tasks like: PCB design, embedded systems programming, writing documentation and testing.

TEACHER ASSISTANT at *Universidad de Buenos Aires* **Oct 2020 - today**

- ⋄ Subject: physics 2 (electrostatics and magnetostatics)
- Solving physical problems.
- ⋄ Guide students in their exam preparation.

EDUCATION

ELECTRONIC ENGINEERING.

Universidad de Buenos Aires.

2017 - 2024

 Thesis: Diseño, control y automatización de un sistema compuesto por dispositivos de medición para el estudio de descargas de granos en entornos húmedos.

TECHNICAL BACHELOR IN ELECTRONICS Escuela Tecnica ORT.

2012 - 2016

VOLUNTEERING

ROBOTICS CLUB. (FIUBA)

2023 - today

- Learning through making.
- Guiding younger students.

PROJECTS

GRAD9000. **202**4

♦ Guardián robótico, acompañante doméstico. Proyect inspired by the HAL9000 robot from Stanley Kubrick's 2001 Space Odyssey. I used an ESP32 based board for the main logic and an audio module so that it looks like it's talking. Most of the mechanical parts are recicled or 3D printed.

CODELED 2024

 \diamond Toy for those interested in learning how morse code works. It has an led that blinks following the morse code protocol and a display that shows which character is currently being transmitted. The objective is to decode the phrase being transmitted (ideally not looking at the display).

INGUIDE 2023 - 2024

♦ Videogame born as an attempt to make engineering and STEMs look more appealing by learning through gaming.

NEURAL NETWORKS FOR HIDROGEL DETECTION

2022

♦ Used a custom made dataset to train a yolov7 neural network and then used it to detect hidrogels falling through a hopper.

All my projects can be found on my portfolio.