

# **Biluta Titus**

**Date of birth:** 07/02/1999

Nationality: Romanian

**Gender:** Male

#### CONTACT

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- O titus.biluta



#### **ABOUT ME**

Currently, I am a master's degree student at Technical University of Cluj-Napoca specializing in advanced manufacturing process control engineering. Faculty of Automation.

Alongside my academic pursuits, I devote my free time to sports, engaging

in both fitness and basketball.

I believe that perseverance and a passion for technology guide me in my academic and personal journey. Also, I have a passion for design and simulation, which emerged when I realized that it is a way to create something both aesthetically and functionally at the same time.

## **WORK EXPERIENCE**

2020 - 2021 Cluj-Napoca, Romania

**Internship at college - Security Systems Engineer** Saico General Cables

#### **EDUCATION AND TRAINING**

2022 - CURRENT Cluj-Napoca, Romania

Master's student in Computer Science and Automation (ICAF). Technical University Of Cluj-Napoca

Website https://ac.utcluj.ro/acasa.html

**2018 – 2022** Cluj-Napoca, Romania

Engineer (Electrical Engineering) Technical University Of Cluj-Napoca

Website https://ie.utcluj.ro/acasa.html

**2014 - 2018** Cluj-Napoca, Romania

High school student "Onisifor Ghibu" Theoretical High School

Website <a href="https://www.liceul-onisifor-ghibu.ro/">https://www.liceul-onisifor-ghibu.ro/</a>

### LANGUAGE SKILLS

MOTHER TONGUE(S): romana
OTHER LANGUAGE(S): English

### **DIGITAL SKILLS**

#### **WEB DESIGN**

CSS Grid  $\mid$  Basic Docker knowledge  $\mid$  jQuery library  $\mid$  CSS Flexbox  $\mid$  HT ML, CSS, Javascript

### **PC OFFICE**

Microsoft Excel | Microsoft PowerPoint | Microsoft Office | Social Media | Microsoft Word

#### **ELECTRIC**

Ansys Q2D/Maxwell/HFSS | MATLAB-Simulink | OrCAD-PSPICE

IDE - IntelliJ, Visual Studio, Visual Studio Code | Git, GitHub, GitLab **OTHER** 

SolidWorks | mathematical programming language: Matlab, MathCad



#### ADDITIONAL INFORMATION

# **Projects**

**LED Resonance - Arcade Game (Bachelor's Thesis)** Throughout the course of a game, in order to have greater power to destroy an enemy, more intense vibrations are needed. Vibrations are obtained through high resonances.

When a physical system is subjected to a successive external action, with a frequency close to its own, a vibration state called resonance is formed.

To highlight this resonance, a circuit consisting of an LED strip and an accelerometer/gyroscope is chosen. The resonance is visible only when the module with accelerometer and gyroscope is activated by a sudden left-right movement.

The game reproduced by me, one-dimensional, consists of a breadboard, a Wi-Fi module (ESP32), another module consisting of the gyroscope and accelerometer (MPU6050), wires, a buzzer connected to an audio amplifier (PAM8043), a 470 Ohm resistor, a power supply module, and a LED strip with 144 diodes (NEOPIXEL).

The gyroscope and accelerometer have the role of helping the LED strip to know how the MPU6050 component is oriented and to understand its position in order to display the green LED. The precision of these functions in the module is very high.

Link <a href="https://flic.kr/p/2pz3iZa">https://flic.kr/p/2pz3iZa</a>

**Frontend - Glas** The project was created using HTML, CSS, and JavaScript and represents the web application for the clothing brand that I plan to launch in the future.

Link https://titusbilutaviorel.github.io/Glas/

SolidWorks - Lighter An assembly (lighter) made up of eight components fully defined.

Link https://flic.kr/p/2pz3nAP

**SolidWorks - Bike** An assembly (bicycle) made up of nine components fully defined.

Link https://flic.kr/p/2pu4YrG