

# EDUARDO HENRIQUE BASILIO DE CARVALHO

October 25, 2001    Liberdade, Belo Horizonte, Minas Gerais, Brazil

eduardohbc@ufmg.br    eduardohenriquebcarvalho@gmail.com

GitHub: <https://github.com/eduardo-ufmg>

LinkedIn: <https://www.linkedin.com/in/eduardo-carvalho-9233ba37a>

## EDUCATION

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### COMPLETED

#### Technical Degree in Mechatronics

*Centro Federal de Educação Tecnológica (CEFET-MG)*

2017 to 2019

### IN PROGRESS

#### Bachelor's in Control and Automation Engineering

*Universidade Federal de Minas Gerais (UFMG)*

9th semester, expected graduation 2027/1

### FUTURE FOCUS

Bachelor's in Computer Engineering; Master's and PhD in Computer Engineering

## PROFESSIONAL EXPERIENCE

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### Technical Internship

*Betim Química*

Maintenance of industrial printers

2020/1 to 2021/1

### Undergraduate (non-mandatory) Internship

*RSTech*

Maintenance of laboratory equipment

2021/2

### Technical Support

*Eletrogate*

Maintenance and development of electronic learning kits, technical support

2022/1 to 2024/1

### Future Focus

Development of digital accelerators, embedded systems, machine learning libraries

## EXTRACURRICULAR ACTIVITIES

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### Research

**Design and implementation of peripheral hardware accelerators for graph-based classification algorithms**

*UFMG*

2024/1 - ongoing

**Implementation of a teaching testbed for a control laboratory**

*UFMG*

2025/1 - ongoing

**Implementation of a Modbus RTU/TCP converter for a teaching laboratory**

*UFMG*

completed 2025/1

## **Teaching**

**Computer Architecture and Organization — Teaching Assistant**

*UFMG*

2024/1 - 2025/2

## **Leadership & Organization**

**Co-organizer of IEEE CASS — Minas Gerais lectures**

*UFMG*

2024

**CEFAST-Drone — Captain of the Electronics Division**

*CEFET-MG*

2018/1 - 2019/2

## **Professional Development**

**SystemVerilog for Design and Verification**

*Cadence Design Systems*

2024/1

**Verilog Language and Application**

*Cadence Design Systems*

2024/1