# EDUARDO HENRIQUE BASILIO DE CARVALHO

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## **EDUCATION**

#### 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

## **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**

## 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

# **Verilog Language and Application**

Cadence Design Systems

2024/1