

Eduardo Henrique Basilio de Carvalho

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1 Education

Technical Degree in Mechatronics 2017 to 2019
Centro Federal de Educação Tecnológica (CEFET-MG)
Bachelor's in Control and Automation Engineering 9th semester, expected graduation 2027/1
Universidade Federal de Minas Gerais (UFMG)
Bachelor's in Computer Engineering; Master's and PhD in Computer Engineering

2 Professional Experience

Technical Internship 2020/1 to 2021/1
Betim Química
Maintenance of industrial printers
Undergraduate (non-mandatory) Internship 2021/2
RSTech
Maintenance of laboratory equipment
Technical Support 2022/1 to 2024/1
Eletrogate
Maintenance and development of electronic learning kits, technical support
Future Focus

Development of digital accelerators, embedded systems, machine learning libraries

3 Research & Academic Activities

Implementation of a Modbus RTU/TCP converter for a teaching laboratory – Universidade Federal de Minas Gerais (UFMG) completed in 2025/1
Implementation of a teaching testbed for a control laboratory – Universidade Federal de Minas Gerais (UFMG) ongoing since 2025/1
Design and implementation of peripheral hardware accelerators for graph-based classification algorithms – Universidade Federal de Minas Gerais (UFMG) ongoing since 2024/1

4 Teaching & Leadership

Computer Architecture and Organization – Universidade Federal de Minas Gerais (UFMG) from 2024/1 to 2025/2
CEFAST-Drone — Captain of the Electronics Division – Centro Federal de Educação Tecnológica (CEFET-MG) 2018/1 to 2019/2
Co-organizer of IEEE CASS — Minas Gerais lectures – Universidade Federal de Minas Gerais (UFMG) 2024

5 Professional Development

Verilog Language and Application – Cadence Design Systems 2024/1
SystemVerilog for Design and Verification – Cadence Design Systems 2024/1

University technical and scientific conferences – Universidade Federal de Minas Gerais (UFMG)