Eduardo Henrique Basilio de Carvalho

Date of birth: October 25, 2001

Address: Liberdade, Belo Horizonte, Minas Gerais, Brazil Email: eduardohbc@ufmg.br (mailto:eduardohbc@ufmg.br),

eduardohenriquebcarvalho@gmail.com (mailto:eduardohenriquebcarvalho@gmail.com)

Education

- Completed: Technical Degree in Mechatronics Federal Center for Technological Education (2017–2019)
- In progress: Bachelor's in Control and Automation Engineering Federal University of Minas Gerais (UFMG), 9th semester, expected graduation 2027/1
- Future plans: Bachelor's in Computer Engineering; Master's and PhD in Computer Engineering

Professional Experience

- Technical Intern Betim Química Maintenance of Industrial Printers (2020/1 to 2021/1)
- Undergraduate (non-mandatory) Intern RSTech Maintenance of Laboratory Equipment (2021/2)
- **Technical Support** Eletrogate Maintenance and development of electronic learning kits (2022/1 to 2024/1)
- Future plans: Development of digital accelerators for large-scale computing systems; embedded systems development; development of libraries for machine learning

Extracurricular

- **Undergraduate Research:** Implementation of a Modbus RTU/TCP converter for use in a teaching laboratory *completed 2025/1*
- Undergraduate Research: Implementation of a teaching testbed for a control laboratory — ongoing since 2025/1
- Undergraduate Research: Design and implementation of peripheral hardware accelerators for graph-based classification algorithms — ongoing since 2024/1
- **Teaching Assistant:** Computer Architecture and Organization (2024/1 to 2025/2)
- Competition Team: CEFAST-Drone Captain of the Electronics Division (2018/1 to 2019/2)
- Co-organizer of lectures for IEEE CASS Minas Gerais (2024)
- Participation in the university's technical and scientific conferences

Social

- GitHub (https://github.com/eduardo-ufmg)
- GitLab (https://gitlab.com/Eduardo-bat)
- LinkedIn (https://www.linkedin.com/in/eduardo-carvalho-9233ba37a)

Papers and presentations: https://github.com/eduardo-ufmg/papers and presentations (https://github.com/eduardo-ufmg/papers and presentations)