

Eduardo Henrique Basilio de Carvalho

Date of birth: October 25, 2001

Address: Liberdade, Belo Horizonte, Minas Gerais, Brazil

Email: eduardohbc@ufmg.br, 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
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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
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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:** CEFAS-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
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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