Henrique Alves Pocinho

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Education

2024	Erasmus Exchange Student, Electronics Engineering, Politecnico di Milano, Milan, Italy.	
2023-2026*	M.Sc. in Electrical and Computer Engineering - Specialization in Electronic Circuits and Systems, Instituto Superior Técnico, Lisbon, Portugal.	-
2020 - 2023	B.Sc. in Electrical and Computer Engineering, Instituto Superior Técnico, Lisbon, Portugal.	Final Grade - 18 (out of 20)

Research Experience

2024 - Now	Intern Assistant, SA-NECS, INESC-ID, (Advisor: Prot. Marcelino Santos)
2023 - 2024	Research Fellow, ASIC, INESC-MN, (Advisor: Dr. Diogo Caetano)
2023	Intern, ASIC, INESC-MN, (Advisor: Dr. Diogo Caetano)

Industry Experience

2025 - Now	Test Engineer, SiliconGate, Lisbon, Portugal
2023 - 2025	Test Engineer Intern, SiliconGate, Lisbon, Portugal

Awards, Honors & Diplomas

Excellent Teacher Award
Academic Excellence Award
Excellent Teacher Award
Certificate ESSCIRC Circuit Insights
Academic Merit Award
Academic Merit Award

^{*}Expected.

Publications

Journal Articles

- J1. **Pocinho, Henrique**, Capeleiro, R., Moita, T., Proença, J., Lima, F., Santos, M. & Passos, F. A Dynamically Reconfigurable Power Management System With Self-Monitoring Capabilities for Energy-Efficient SoCs. *IEEE Open Journal of the Solid-State Circuits Society*, 1–1. ISSN: 2644-1349 (2025).
- J2. Domingos, I., Saadi, Z., Sadanandan, K. S., **Henrique A. Pocinho**, Caetano, D. M., Neves, A. I., Craciun, M. F. & Alves, H. Printed graphene electrodes for textile-embedded triboelectric nanogenerators for biomechanical sensing. *Nano Energy*, 108688. ISSN: 2211-2855 (2023).

Peer-reviewed Conference Proceedings

- C1. Dias, F. M., **Henrique A. Pocinho**, Rodrigues, G., Fernandes, J. & Caetano, D. M. *Ultra-Compact Low-Power 1st Order Quasi-Passive Sigma-Delta Modulator for Organ-on-Chip Systems* in 2025 IEEE ISCAS (2025).
- C2. Dias, F. M., **Henrique A. Pocinho**, Machete, R., Falcão, A. P., Bento, R. & Caetano, D. M. *Modular Sensor Network for Historic Buildings Structural Health Monitoring* in 2024 IEEE SENSORS (2024).

IEEE Outreach

O1. **Pocinho, Henrique**, Manuel, C. V. & Delfino, H. IEEE Circuits and Systems Society and IEEE Solid-State Circuits Society Instituto Superior Técnico Joint Student Branch Chapter Update [Chapters]. *IEEE Solid-State Circuits Magazine* 17, 87–87. ISSN: 1943-0582 (2025).

Research Scholarships

ASIC - Advanced Sensor Interfaces and Circuits Group

PRR-ATE-BM-5: Assemble printed circuit boards for several purposes. Improve and adapt existing equipment and prototypes for the implementation of a IoT sensor network in the Palace of Monserrate.

DEEC - Dep. of Electrical and Computer Engineering at Instituto Superior Técnico

GreenChips-EDU (1018P.06429): Wide-band Laboratory Power Amplifier for test and characterization of integrated circuits.

Reviewer

Conferences

2025 International Conference on Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuit Design - SMACD

Educational Outreach

Workshops

- Ws1. Pocinho, Henrique. Intro to Eletronics. Escola Secundária da Amadora. Apr. 2025.
- Ws2. **Pocinho, Henrique**. *PIC1: PCB Design and DIY*. LEEC IST. May 2025.
- Ws3. Pocinho, Henrique. Eletronics Arduino. HackerSchool Student Organization. Jan. 2022.
- Ws4. Pocinho, Henrique. Eletronics Arduino. HackerSchool Student Organization. May 2022.
- Ws5. Pocinho, Henrique. Intro to Arduino. Jornadas de Engenharia Física IST. Mar. 2022.
- Ws6. Pocinho, Henrique. Maker Starter Pack Worshop Eletronics. IST Community. Mar. 2022.
- Ws7. Marques, H. & **Pocinho, Henrique**. How To Use Scrum and Sprints To Make Your Time More Agile. IStartLab. Mar. 2021.
- Ws8. Pocinho, Henrique. Arduino Basics. Colégio Sagrado Coração de Maria. Dec. 2021.

Teaching

Instituto Superior Técnico - Universidade de Lisboa

2025/26	Teaching Assistant, Radio-Frequency Integrated Systems
2025/26	Teaching Assistant, Analog and Digital Filters
2024/25	Teaching Assistant, Radio-Frequency Integrated Systems
2023/24	Teaching Assistant, Electronic Circuits
2023/24	Teaching Assistant, Instrumentation and Measurement
2023/24	Teaching Assistant, Electronic Systems
2023/24	Teaching Assistant, Digital Systems
2023/24	Teaching Assistant, Electronics
2022/23	Teaching Assistant, Electronic Circuits
2022/23	Teaching Assistant, Programming
2022/23	Teaching Assistant, Digital Systems
2022/23	Teaching Assistant, Circuit Analysis

Voluntary Experience

2025 - Now	Branch Chair, IST IEEE Student Branch, Lisbon, Portugal.
2024 - 2025	Student Representative - ECS Specialization, DEEC - IST, Lisbon, Portugal.
2024 - 2025	Chapter Chair, IST IEEE Student Branch - CAS & SSCS Chapter, Lisbon, Portugal.
2024	Chapter Founder, IST IEEE Student Branch - CAS & SSCS Chapter, Lisbon, Portugal.
2024	Organizer of the 2 nd Ed. of Microeletronics PhD Talks, DEEC - IST, Lisbon, Portugal.
2023 - 2024	Student Representative - ECS Specialization, DEEC - IST, Lisbon, Portugal.
2022	Marketing Coordinator, HackerSchool Student Organization - IST, Lisbon, Portugal.
2021 - 2022	Development Leader, HackerSchool Student Organization - IST, Lisbon, Portugal.
2021 - 2022	Member of the Board, HackerSchool Student Organization - IST, Lisbon, Portugal.
2021	Development Assistant, HackerSchool Student Organization - IST, Lisbon, Portugal.
2020 - 2022	Member, HackerSchool Student Organization - IST, Lisbon, Portugal.

Projects

HackerSchool Student Organization - IST

HS-Inventory: Platform to manage the inventory of HackerSchool tools and items, as well as allow members to request said tools and items.

LED Sign for BEST Lisbon: Fully programmable LED sign developed for BEST Lisbon.

LED Matrix: LED matrix connected via Wi-Fi to a website that allowed the user to chose between several light modes, including a scrolling display of text typed on the website.

MIDI Keyboard: Adaptation of a vintage electronic keyboard to a MIDI one.

IEEE IST Student Branch - CAS & SSCS Chapter

M.E.S.A.: All based image recognition system, that counts the numbers of fingers shown to a camera and presents in a screen the multiplication of all fingers shown.

EH-BLT: Energy harvesting platform with custom made PCB, circuitry and antenna to take advantage of non-used power in the bluetooth frequency band.

Other Experience

2024 - 2025 Private Tutor
2022 Teacher, SHARKCODERS, Laranjeiras, Lisboa, Portugal

Last updated: October 27, 2025