

# Curriculum Vitae

Antônio Horta Ribeiro  
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## 1. Personal Information

- **Birthdate and place:** 1992-10-21, Brazil.
- **Work Address:** Room 308, Teknikringen 14, KTH SE-100 44 Stockholm, Sweden
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## 2. Academic Positions

- **Postdoctoral Associate** *Fev. 2022 - Now* - KTH ROYAL INSTITUTE OF TECHNOLOGY, STOCKHOLM, SWEDEN
- **Postdoctoral Fellow** *Fev. 2021 - Jan. 2023* - DEPARTMENT OF INFORMATION TECHNOLOGY, UPPSALA UNIVERSITY, UPPSALA, SWEDEN
- **Postdoctoral Associate** *Mar. 2020 - Fev. 2021* - DEPARTMENT OF COMPUTER SCIENCE, UFMG, BELO HORIZONTE, BRASIL

## 3. Education

- **Ph.D., Electrical Engineering** *Aug. 2017 - Mar. 2020* - UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG), BRAZIL
- **M.Sc., Electrical Engineering** *Jan. 2016 - Jul. 2017* - UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG), BRAZIL
- **B.S.E., Electrical Engineering** *Jan. 2016 - Jul. 2017* - UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG), BRAZIL

## 4. Awards

- **Benzelius award** *2022* - ROYAL SOCIETY OF SCIENCES IN UPPSALA
- **Best Ph.D. Thesis in Engineering and Physical Sciences** *2021* - UNIVERSIDADE FEDERAL DE MINAS GERAIS
- **Best Ph.D. Thesis in Electrical Engineering** *2021* - UNIVERSIDADE FEDERAL DE MINAS GERAIS
- **Young Author Award (Honorable Mention)** *2021* - 19TH IFAC SYMPOSIUM ON SYSTEM IDENTIFICATION
- **Best Poster Award** *2019* - SCILIFELAB SCIENCE SUMMIT
- **Travel Award** *2018* - MACHINE LEARNING FOR HEALTH (ML4H) WORKSHOP AT NEURIPS

## 5. Scholarships

- **UGhent mobility grant** *2023* - GHENT UNIVERSITY - 10.000 EUR, SWEDEN
- **SFVE-A mobility grant** *2023* - FRENCH INSTITUTE OF SWEDEN, SWEDEN
- **ELISE mobility grant** *2023* - EUROPEAN NETWORK OF AI EXCELLENCE CENTRES, EUROPE
- **CAPES-PRINT** *2020-2021* - CAPES, BRAZIL
- **Split-site Ph.D. Scholarship** *2019* - CNPQ, BRAZIL
- **Ph.D. Scholarship** *2018-2020* - CNPQ, BRAZIL
- **M.S. Scholarship** *2016-2017* - CAPES, BRAZIL

## 6. Supervision

### A) Ph.D. students, co-supervisor

- **Daniel Gedon** *Aug. 2019 - June 2024 (estimated)* - UPPSALA UNIVERSITY, SWEDEN

### B) M.Sc. students, supervisor

- **Arvid Eriksson** *Jan 2024 - June 2024 (estimated)* - KTH, SWEDEN
- **Oscar Larsson** *Feb. 2022 - July 2022* - UPPSALA UNIVERSITY, SWEDEN
- **Theogene Habineza** *Jan. 2022 - June 2022* - UPPSALA UNIVERSITY, SWEDEN

### C) M.Sc. students, subject reviewer

- **Johan Millberg** *Jan. 2023 - June 2023* - UPPSALA UNIVERSITY, SWEDEN
- **Christie Courtage** *Jan. 2022 - June 2022* - UPPSALA UNIVERSITY, SWEDEN
- **Meenal Pathak** *Feb. 2022 - Apr. 2022* - UPPSALA UNIVERSITY, SWEDEN

## 7. Longer scientific visits

- **Ecolé Normale Supérieure / INRIA** *March 2023 - June 2023* - VISITING RESEARCHER, PARIS, FRANCE
- **Uppsala University** *September 2018 - September 2019* - VISITING PHD STUDENT, UPPSALA, SWEDEN

## 8. Teaching

- **Advanced Probabilistic Machine Learning** *Fall - 2022* - UPPSALA UNIVERSITY, SWEDEN
- **Artificial Intelligence and Machine Learning** *Spring - 2022* - WASP GRADUATE SCHOOL, SWEDEN
- **Advanced Probabilistic Machine Learning** *Fall - 2021* - UPPSALA UNIVERSITY, SWEDEN
- **The unreasonable effectiveness of overparameterized machine learning models** *Fall - 2021* - UPPSALA UNIVERSITY, SWEDEN
- **Deep Learning** *Spring - 2021* - UPPSALA UNIVERSITY, SWEDEN
- **Engenharia de Controle (Control Engineering)** *2nd - 2016* - UNIVERSIDADE FEDERAL DE MINAS GERAIS, BRAZIL
- **Controle Digital (Digital Control)** *2nd - 2016* - UNIVERSIDADE FEDERAL DE MINAS GERAIS, BRAZIL

## 9. Professional activity

### A) Peer reviewing: journal papers

- *Nature Communications* (2024),
- *Communications Medicine* (2023),
- *Heart* (2021),
- *IEEE Transactions on Automatic Control* (2021),
- *Heart* (2021),
- *IEEE Transactions on Instrumentation and Measurement* (2021),
- *International Journal of System Science* (2021),
- *Proceedings of the National Academy of Sciences (PNAS)* (2020),
- *Automatica* (2020),
- *IEEE Transactions on Biomedical Engineering* (2020),
- *IEEE Control Systems Letters (L-CSS)* (2020, 2024),
- *Systems and Control Letters* (2020),
- *Chaos, Solutions and Fractals* (2020),
- *Chest* (2020),
- *Journal of Electrocardiology* (2020),
- *Journal of Control, Automation and Electrical Systems* (2015-2018),

### B) Peer reviewing: conference papers

- *International Conference on Artificial Intelligence and Statistics (AISTATS)* (2020-2024),
- *IFAC Symposium on System Identification (SysId)* (2021, 2024),
- *Learning for Dynamics and Control (LADC)* (2021, 2022),
- *European Control Conference (ECC)* (2020, 2021),
- *IEEE Conference on Decision and Control (CDC)* (2020, 2024),
- *IFAC World Conference* (2017, 2020, 2023),
- *American Control Conference* (2018, 2024),
- *International Conference on Modelling, Identification and Control* (2017),

### C) Expert assignments

- ELLIS (European Laboratory for Learning and Intelligent Systems) PhD Program: Recruitment evaluator 2020
- Co-chair at the session ‘Parameter Estimation 1’ at the 19th IFAC Symposium on System Identification 2021

### D) External examiner in PhD. and M.Sc. defenses

- Najmeh Fayyazifar , Level: Ph.D. 2022 Edith Cowan University, Australia *Deep learning and neural architecture search for cardiac arrhythmias classification*
- Thiago de Almeida Ushikoshi , Level: M.Sc. 2022 Universidade Federal de Minas Gerais, Brazil *Learning Nonlinear Dynamics With Echo State Networks*

## E) Invited talks

- **Karolinska Institutet @ DDLS fellow public research seminars** *February 2024* - DATA-DRIVEN ECG ANALYSIS
- **Royal Institute of Technology, KTH, Sweden @ Division of Robotics, Perception and Learning** *November 2023* - LINEAR ADVERSARIAL TRAINING, ROBUSTNESS IN MACHINE LEARNING AND APPLICATIONS TO CARDIOLOGY
- **Laboratório Nacional de Computação Científica @ Petrópolis, RJ, Brazil (online)** *October, 2023* - ATAQUES ADVERSÁRIAS EM MODELOS LINEARES
- **Imperial College, UK @ Imperial Centre for Translational and Experimental Medicine** *July, 2023* - ROBUSTNESS IN LARGE-SCALE MACHINE LEARNING AND ITS RELEVANCE TO AI-ENABLED ECG
- **IEEE EMBS @ Germany Chapter, Göttingen (online)** *May, 2023* - THE THREE CHALLENGES OF USING DEEP NEURAL NETWORKS IN ELECTROCARDIOGRAPHY
- **PUC Rio, Brazil @ Department of Mechanical Engineering** *May, 2023* - REVISITANDO O PRINCÍPIO DA PARCIMÔNIA NA IDENTIFICAÇÃO DE SISTEMAS E APRENDIZADO DE MÁQUINA
- **INRIA Paris, France @ SIERRA team** *March, 2023* - OVERPARAMETRIZED LINEAR REGRESSION UNDER ADVERSARIAL ATTACKS
- **Seminars on Advances in Probabilistic Machine Learning @ Aalto University and ELLIS unit Helsinki** *November 2022* - ADVERSARIAL ATTACKS IN LINEAR REGRESSION
- **University of British Columbia, Canada @ Christos Thrampoulidis group (Online)** *June 2022* - OVERPARAMETRIZED LINEAR REGRESSION UNDER ADVERSARIAL ATTACKS
- **University of Luxembourg @ Systems Control Group, LCSB (Online)** *March 2022* - DEEP NEURAL NETWORKS FOR AUTOMATIC ECG ANALYSIS
- **International Congress on Electrocardiology (Online)** *April 2021* - ARTIFICIAL INTELLIGENCE FOR ECG CLASSIFICATION AND PREDICTION OF THE RISK OF DEATH
- **Techinon, Israel @ AIMLab group (Online)** *March 2021* - ARTIFICIAL INTELLIGENCE FOR ECG CLASSIFICATION AND PREDICTION OF THE RISK OF DEATH

## 10. Additional work experience

### A) Open source development

- **SciPy team member** - 2017 - 2021

### B) Others

- **Software Developer** *May. 2017 - Aug. 2017* - GOOGLE SUMMER OF CODE
- **Hardware Team Intern** *Jan. 2015 - Dec. 2015* - INVENT VISION
- **Undergraduate Researcher** *Jun. 2013 - Jan. 2015* - RESEARCH AND DEVELOPMENT PROJECT WITH PETROBRAS OIL COMPANY, UFMG