

EMILIO TANOWE MADDALENA

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👤 Nationalities: Italian and Brazilian
🌐 LinkedIn 🐙 GitHub 🎓 Scholar

EDUCATION

2018–2023	📖 École polytechnique fédérale de Lausanne (EPFL) Ph.D. in Electrical Engineering	Lausanne, Switzerland
2016–2018	📖 Brazilian Institute of Aeronautics (ITA) M.Sc. in Systems and Control	São José dos Campos, Brazil
2010–2015	📖 Universidade Federal de Mato Grosso do Sul (UFMS) B.Sc. in Electrical Engineering	Campo Grande, Brazil

ACADEMIC OUTPUT

Publications	📖 Authored or co-authored a total of 14 journal papers and 8 conference papers in the fields of Control Systems and Electrical Engineering.
Supervision	📖 Supervised 11 master thesis and semester project students.

PROFESSIONAL EXPERIENCE

2022–2022	📖 Visium AG AI TECHNOLOGY CONSULTANT (INTERNSHIP) Ideated and scoped AI-related projects (e.g. inventory optimization, bank fraud detection and state of health prediction), and supported Visium's COO and CTO in several initiatives. Assessed the clients' needs and translated them into data and algorithmic requirements for Visium's engineers.	Lausanne, Switzerland
2020–2020	📖 Mitsubishi Electric MACHINE LEARNING CONSULTANT (INTERNSHIP) Developed scalable and efficient Bayesian optimization algorithms to calibrate digital-twin models of air-conditioning systems. The approach yielded an 80% speed-up in the calibration process and a patent was filed as a result of the internship.	Cambridge, USA
2015–2017	📖 Silis Tecnologia Ltda R&D ENGINEER Designed an electronic PV-based water-pumping system (hardware and firmware). Conducted field tests of various versions of the system. The product was finally deployed in Guinea-Bissau and Jamaica to aid isolated communities of farmers by providing them with clean water.	Campo Grande, Brazil

CORE SKILLS

Languages	📖 English – Full professional proficiency French – Intermediate proficiency Italian – Full professional proficiency Portuguese – Full professional proficiency
Technical	📖 Computer programming: Python and MATLAB (intermediate), C and JavaScript (basic). Data science: Solid skills in data analysis and modeling: auto-regressive models, Bayesian regression, decision trees, random forests, etc. Database technologies: SQL and noSQL databases (for time-series). Cloud technologies: AWS and Heroku for application hosting.