



## Leonardo Tomasi Francis (M. Sc)

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### Personal

- Data Engineer at BettrAds and researcher at the Laboratory for Software and Hardware Integration ([LISHA](#))
  - Master student in [Computer Science](#) at Federal University of Santa Catarina ([UFSC](#))
  - Curriculum Vitae at ([Lattes](#))
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### Research Topics

- Machine Learning for Failure Detection on Automotive ECUs;
  - Activities: Evaluation of different models using Knock Signals from ECU to detect faults; Data analysis of experiments that generates the dataset.
- Liveness Detection on Video Inputs;
  - Activities: Evaluation of models using video inputs to detect real and fake inputs.

### Publications

- CUNHA, RENAN ; MEDEIROS DE ARAUJO, GUSTAVO ; MACIEL, RODRIGO ; NANDI, GIANN S. ; DAROS, MARINA R. ; CARDOSO, JOICE P. ; FRANCIS, LEONARDO T. ; RAMOS, VINICIUS F.C. ; MARCELINO, RODERVAL ; FROHLICH, ANTONIO AUGUSTO . Applying Non-destructive Testing and Machine Learning to Ceramic Tile Quality Control. In: 2018 VIII Brazilian Symposium on Computing Systems Engineering (SBESC), 2018, Salvador. 2018 VIII Brazilian Symposium on Computing Systems Engineering (SBESC), 2018. p. 54. [DOI](#)
  - T. FRANCIS, LEONARDO; CATALDO SCHARLAU, CÉSAR . Estudo Experimental De Um Sistema De Controle Para Integração Eficiente Da Iluminação Natural E Artificial. In: Congresso Brasileiro de Automática 2020, 2020. Anais do Congresso Brasileiro de Automática 2020, 2020. v. 2. [DOI](#)
  - T. FRANCIS, LEONARDO; PIEROZAN, VICTOR; GRACIOLI, GIOVANI, M. DE ARAUJO; GUSTAVO. Data-driven Anomaly Detection of Engine Knock Based on Automotive ECU; In: 2022 XII Brazilian Symposium on Computing Systems Engineering (SBESC), 2022, Fortaleza. 2022 XII Brazilian Symposium on Computing Systems Engineering (SBESC), 2022. [DOI](#)
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### Contact

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