Sidi Mohamed Sid'El Moctar

PhD Student · Computer Science

Université de technologie de Compiègne, rue du docteur Schweitzer, 60203 Compiègne

sidimohamed.sidelmoctar@utc.fr | Sidi Mohamed Sid'El Moctar

Bio

I am a Machine Learning PhD student at the University of Technology of Compiègne. My research focuses on applying Machine/Deep Learning for biomedical siganl processing. I want to introduce novel, efficient and interpretable data-driven representation learning techniques with a particularl interest to sparse, hybrid as well as deep representations.

Education

University of technology of Compiègne *Compiègne, France*

PhD Computer Science *Dec 2021 - present*

- These title : Data Driven Representation Learning for Biomedical Data Classification
- Advisors: Prof. Sofiane Boudaoud and Dr. Imad Rida

University of Lille *Lille, France*

MS Data Science in Healthcare *2019 - 2021*

- These title : Comparison between relational database and graph-oriented database for the contact tracing
- Advisor: Dr. Antoine Lamer

University of Lille *Lille, France*

BS Mathematics, Statistics & Business Intelligence *2018 - 2019*

- These title : Comparison of exact and asymptotic confidence intervals for a proportion
- Advisor: Dr. Baba Thiam

University of Nouakchott *Nouakchott, Mauritania*

BS Mathematics Applied to Economics and Finance *2015 - 2018*

Professional Experience

Dec 2021-present **PhD Candidate**, Université de technologie de Compiègne: Data Driven Representation Learning for Biomedical Data Classification

Sep 2022-present **Graduate Teaching Assistant**, Université de technologie de Compiègne : Data Analysis, Statistics

Oct 2020-Sep 2021 **Data Analyst**, Oscar Lambret Center

Mar 2020-Aug 2020 **Data Scientist intern**, Lesaffre International

Publications

Accepted

S Moctar, SM, Diab, A, Rida, I, Kinugawa, K, Boudaoud, S. 2023. Active aging prediction from muscle electrical activity using HD-sEMG signals and machine learning. IEEE 36th International Symposium on Computer-Based Medical Systems — CBMS 2023.

S Moctar, SM, Rida, I, Boudaoud, S. 2023. Time-domain features for sEMG signal classification: A brief survey. JETSAN symposium 2023.

Submitted

S Moctar, SM, Rida, I, Boudaoud, S. Comprehensive Review of Feature Extraction Techniques for sEMG Signal Classification: From Handcrafted Features to Deep Learning Approaches (*Submitted* - Elsevier IRBM)

In Preparation

S Moctar, SM, Rida, I, Kinugawa, K, Boudaoud, S. CNN-Based Classification of Active Aging Using Time-Frequency Representation of HD-sEMG Signals

Skills

Software Engineering	Python, R, SQL, Neo4j, Power BI
Data Science Libraries	Scikit-Learn, Pandas, Numpy, Scipy, Matplotlib, Plotly, TensorFlow, Keras, PyTorch
System Administration	GNU/Linux, MacOS X , Git
Languages	English, French, Arabic

References

Sofiane Boudaoud Full Professor, Université de technologie de Compiègne, sofiane.boudaoud@utc.fr

Imad Rida Associate Professor, Université de technologie de Compiègne, imad.rida@utc.fr

Antoine Lamer Associate Professor, Université de Lille, antoine.lamer@univ-lille.fr

Marie-Cécile Le Deley Head of Promotion, Methodology and Biostatistics in The Clinical Research and Innovation Department, Centre Oscar Lambret, m-ledeley@o-lambret.fr