Abdoul Jalil Djiberou Mahamadou, Ph.D.
abdjiber@stanford.edu || abdjiber.github.io || LinkedIn || Google Scholar || +1-650-250-2940

EDUCATION

- Ph.D. in Computer Science, University of Clermont Auvergne, (10/2018 – 09/2021)
  Thesis: Development of clustering algorithms for categorical data and applications in Health
- M.Sc. in Computer Science, University of Clermont Auvergne, (09/2017 – 09/2018)
- M.Eng. in Applied Mathematics and Modelling, University of Clermont Auvergne, (09/2015 – 09/2018)
- B.Sc. in Applied Mathematics, Sidi Mohamed Ben Abdellah University, (09/2012 – 06/2015)

RESEARCH EXPERIENCE

- **Postdoctoral Researcher**, Stanford University and GSK.ai, (06/2023 – present)
  - Developed a new metrics to measure the amount of fairness gained in AI models.
  - Engaging stakeholders to assess AI deployment risks at Stanford Health Care and developing socio-technical and context-sensitive evaluation methods.
  - Analyzing data collected from stakeholders with qualitative methods to inform recommendations on AI tools' continued development and use at Stanford Health Care.
- **Postdoctoral Researcher**, Simon Fraser University, (08/2022 – 05/2023)
  - Formulated research hypotheses and designed methodology to investigate the impact of lifestyle activities on cognitive health in older adults.
  - Used machine learning and statistical methods to conduct experiments on a large-scale biobank and longitudinal health survey databases to support personalized intervention strategies for cognitive decline.
- **Postdoctoral Researcher**, University of Clermont Auvergne, (05/2022 – 07/2022)
  - Partnered with a company to develop a novel machine learning technique for anomaly detection in streaming data.
- **Machine Learning Scientist**, Prevision.io, (10/2021 – 02/2022)
  - Won a data science hackathon against Prevision.io's AutoML SaaS before joining the company.
  - Worked on European project AIDOaRt and wrote 7 technical blog posts explaining the company's products and competitive advantages.
- **Doctoral Researcher**, University of Clermont Auvergne, (10/2018 – 09/2021)
  - Designed, implemented, and developed two AI techniques for qualitative data using advanced probabilistic and mathematical theories. Collaborated with national and international researchers to validate the methods on longitudinal survey data.

AWARDS AND DISTINCTIONS

- Nominated as the best Nigerien student in France based on academic performance (2020).
- Received national and international awards for a start-up in AI-enhanced automated irrigation among hundreds of projects (2019 and 2020).

PROJECTS

- Developed LLM Water Tracker, a Google Chrome extension that determines LLM inference water usage equivalence.
- Working on the development of machine translation AI models for under-resourced languages in Niger.

SELECTED PUBLICATIONS

- **Abdoul J. Mahamadou**, & Trotsyuk, A. A. (2025). Revisiting technical bias mitigation strategies. Annual Review of Biomedical Data Science, 8. Presented at NeurIPS AFME 2024.
- **Abdoul J. Mahamadou**, Rodrigues, E. A., Vakorin, V., Antoine, V., & Moreno, S. (2025). Interpretable Machine Learning for Precision Cognitive Aging. Frontiers in Computational Neuroscience, 19, 1560064.
- Anne Marthe Sophie Ngo, **Abdoul J. Mahamadou**, Michael F. Mbouopda, Engelbert MN. (2022). DragStream: An anomaly and concept drift detector in data streams. International Conference on Data Mining IncrLearn Workshop.