

Jama Hussein Mohamud

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Education

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- African Institute for Mathematical Sciences (AIMS) Kigali, Rwanda** October 2019 – September 2020
- MSc., Machine Intelligence (AMMI) supervised by *Dr. Moustapha Cisse*
 - [Recipient of the Google & Facebook scholarship](#)
 - **Research Thesis:** Privacy-preserving representations Learning
- Anadolu University, Eskisehir, Turkey, GPA (3.8/4.0)** September 2016 – October 2019
- MSc., Electrical & Electronic Engineering supervised by *Prof. Dr. Omer Nezh Gerek*
 - [Recipient of Turkish Government scholarship](#)
 - **Research Thesis:** A machine learning approach to estimation and classification of poverty levels
- Gollis University, Hargeisa, Somaliland, GPA (3.99/4.0)** November 2012 – September 2015
- BSc., Telecommunication Engineering
 - **University Honor:** (President list - 9 semesters)
 - **Research Thesis:** Implementation and design of line follower robot

Publications

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- **J. H. Mohamud;** *M.Y. Fuge, M. Cisse.* Self-supervised private representation learning (under review)
 - **J.H. Mohamud,** *L. A. Thompson, A. Ndaye, L. Besacier.* Fast Development of ASR in African Languages using Self Supervised Speech Representation Learning ([EACL 2021](#))
 - **J. H. Mohamud;** *O. N. Gerek.* Poverty Level Characterization via Feature Selection and Machine Learning ([IEEE SIU 2019](#))

Work & Teaching Experience

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- AIMS (African Institute for Mathematical Sciences) Mbour, Senegal**
- Researcher / Teaching assistant** December 2020 - November 2021
- Worked on privacy-preserving representations Learning
 - Aiding AMMI students with machine learning courses by mentoring, facilitating tutorials, and writing coding scripts
- Neuromatch Academy Deep Learning Summer School, Online, USA**
- Project Teaching assistant** July 2021 - August 2021
- Prepared two projects for over 100 students participating in the summer school program, [\[project 1\]](#), [\[project 2\]](#), [\[slides\]](#)
 - Supervised 8 groups (undergraduate and graduate students) consisting of 3-10 members on their projects
- Bilisim Vadisi, Gebze, Turkey**
- Machine Learning Engineer** January 2019 – October 2019
- Built real-time tracking system for car plate detection and recognition
 - Developed a system for Ford that automatically checks if there are misplaced, missing, or extra objects on the car board
 - Developed real-time object detection systems for tracking, detecting defects, and OCR
- Anadolu University, Eskisehir, Turkey**
- Researcher** February 2018 – January 2019
- Created a vision-based system to recognize sign-language gestures from video sequences
 - Implemented an algorithm that adaptively resizes the images without losing/distorting the content of the images [\[GitHub\]](#)
 - Implemented Edge Detection and Hough Transform algorithm to detect the vanishing points in the image [\[GitHub\]](#)
- Somtel International LTD, Hargeisa, Somaliland**
- Software Engineer** March 2014 – September 2015
- Tested and evaluated servers to check the efficiency, reliability, and compatibility with other systems
 - Configured switches and routers to build fully functional network systems

Open Source Projects

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- Developed a fully functioning face recognition system that is currently used by many industries, [\[GitHub\]](#)
 - Implementation of SAINT (Improved Neural Networks for Tabular Data via Row Attention and Contrastive Pretraining) [\[GitHub\]](#)
 - Developed kernel methods to predict whether a DNA sequence region is binding to a specific transcription factor [\[GitHub\]](#)

Technical Skills

ML: TensorFlow, PyTorch, OpenCV, SciKit **Coding:** Python (Expert), C++ (Proficient), Java (Proficient) **Soft skills:** Good Debugger, Good problem solver, Fast learner **DevOps:** Linux, Cloud, Docker, Git **Databases:** SQL, Solr

References

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- Available upon request