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Black in AI increases the presence and inclusion of Black people in the field of AI by creating space for sharing ideas, fostering collaborations, mentorship and advocacy. [www.blackinai.org](http://www.blackinai.org).

# Black in AI Workshop co-located with NeurIPS 2022

**Nov 28th - Workshop Schedule - Room 288-289  
New Orleans Convention Center**

(Time Zone\*: CST)

09:40 AM	Opening Remarks
09:50 AM	<b>Invited Talk 1: Cross-lingual Transfer for Named Entity Recognition: A study on African Languages.</b> <i>David Ifeoluwa Adelani (University College London)</i>
10:35 AM	Q&A
10:50 AM	<b>Contributed Talk 1: Unsupervised convolutional neural networks-based 3D reconstruction from 2D medical images guided by generative models.</b> <i>Jean-Rassaire Fouefack (Isen Yncréa Ouest and LaTIM INSERM U1101)</i>
11:05 AM	<b>Contributed Talk 2: COVID-19 Radio ASR: Analyzing community voices from radio broadcasts for public health planning, response and policy.</b> <i>Jonathan Mukibi (Makerere University)</i>
11:20 AM	<b>Contributed Talk 3: Stronger is not better: Better Augmentations in Contrastive Learning for Medical Image Segmentation.</b> <i>Azeez Idris (Iowa State University)</i>
11:35 AM	<b>Contributed Talk 4: Re-QGAN: an optimized adversarial quantum circuit learning framework.</b> <i>Anais Sandra Nguemto Guiawa (University of Tennessee Knoxville)</i>
11:50 AM	Q&A for Contrib Talks 1, 2, 3, 4
12:10 PM	Mentoring session: "Preparing for a career after graduation"

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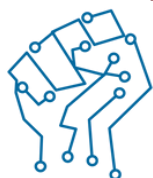
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1:00 PM	Lunch Break
2:30 PM	Invited Talk 2: Learning scene and video understanding with limited labels. <i>Mennatullah Siam (York University)</i>
3:15 PM	Q&A
3:30 PM	Contributed Talk 5: Predictive Multiplicity in Probabilistic Classification. <i>Jamelle Watson-Daniel (Harvard University)</i>
3:45 PM	Contributed Talk 6: End-to-End Multilingual Automatic Speech Recognition for Less-Resourced Ethiopian Languages. <i>Martha Tachbelie (Addis Ababa University)</i>
4:00 PM	Contributed Talk 7: Towards Effective Speech-based AI in the Classroom: The Case of AAE-Speaking Children. <i>Alexander Johnson (UCLA)</i>
4:15 PM	Q&A for Contrib Talks 5, 6, 7
4:30 PM	Joint Affinity Poster Session
5:30 PM	Workshop Ends

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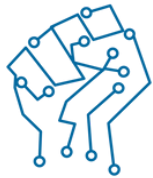


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## Black in AI Accepted Papers - Joint Affinity Poster Session

Mon 28 Nov - 4:30 PM (CST Timezone)

**Predictive Multiplicity in Probabilistic Classification**  
Jamelle Watson-Daniels (Harvard University)\*; David Parkes (Harvard University); Berk Ustun (UCSD)

**Towards trustworthy AI-based algorithms in healthcare: A case of medical images**  
Mbangula Lameck ML Amugongo (Technischen Universität München)\*

**Improving neural machine translation for low-resource languages using related language resources**  
Atnafu Lambebo Tonja (Instituto Politécnico Nacional (IPN), Centro de Investigación en Computación (CIC))\*; Olga Kolesnikova (Instituto Politécnico Nacional (IPN), Centro de Investigación en Computación (CIC))

**Unsupervised convolutional neural networks-based 3D reconstruction from 2D medical images guided by generative models**  
Jean-Rassaire Fouefack (Isen Yncréa Ouest and LaTIM INSERM U1101)\*

**Machine Learning Model for Early Detection of Irish Potato Diseases Based on Crop Imagery Data**  
Hudson C Laizer (Mbeya University of Science and Technology)\*

**Accurate Machine-Learning-Based classification of Leukemia from Blood Smear Images**  
Simon Mekit (Ethiopian Academy of Sciences)\*; Kokeb Dese (School of Biomedical Engineering, Jimma University)

**Towards Effective Speech-based AI in the Classroom: The Case of AAE-Speaking Children**  
Alexander Johnson (UCLA)\*; Abeer Alwan (UCLA); Alison Bailey (UCLA); Robin Morris (Georgia State University); Julie Washington (University of California, Irvine); Mari Ostendorf (University of Washington)

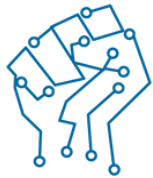
**OCR System for the Recognition of Ethiopic Real-Life Documents**  
Tsefahunegn M Mengistu (Bahir Dar University)\*

**Assisted Learning of New Languages via User Defined and Phoneme Parameterized Pronunciations**  
Amanuel N Mersha (Addis Ababa Institute Technology)\*; Stephen Wu (University of Texas Health Science Center at Houston)

**Ensemble of CNN Models for Tuberculosis Diagnosis**  
Mustapha O Oloko-oba (University of KwaZulu-Natal, Durban)\*

**DynamicViT: Faster Vision Transformer**  
Amanuel N Mersha (Addis Ababa Institute Technology)\*; Samuel A Assefa (J.P. Morgan AI)

**Towards trustworthy AI-based algorithms in healthcare: A case of medical images**  
Mbangula Lameck ML Amugongo (Technischen Universität München)\*



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### YOSM: Yorùbá Sentiment Corpus for Movie Reviews

Iyanuoluwa Shode (Montclair State University)\*; David Ifeoluwa Adelani (DeepMind); Anna Feldman (Montclair State University)

### Interactive Video Saliency Prediction: The Stacked ConvLSTM Approach

Natnael A Wondimu (Addis Ababa University)\*; Cedric Buche (ENIB); Ubbo Visser (University of Miami)

### NigerianPidgin++: Towards End-to-End training of an Automatic Speech recognition system for Nigerian Pidgin Language

Amina Mardiyah Rufai (African Institute for Mathematical Sciences)\*; Abeeb A Afolabi (HARBIDEL TECHNOLOGIES); Daniel Ajisafe (African Institute for Mathematical Sciences); Oluwabukola Adegboro (African Institute for Mathematical Sciences); Odunayo E Oduntan (Chrisland University Abeokuta, Nigeria); O.T. Arulogun (Ladoke Akintola University of Technology, Ogbomoso)

### Convolutional Neural Network deep learning model for early detection of streak virus and lethal necrosis in maize: A case of Northern-highlands, Tanzania

Flavia Stephen Mayo (The Nelson Mandela African Institution of Science and Technology)\*; Neema Mduma (The Nelson Mandela Institution of Science and Technology)

### Development of a Model to Classify Skin Diseases using Ensemble Machine Learning Techniques

Oluwayemisi Jaiyeoba\*; Temitope Owolabi; Emeka Ogbuju - (Federal University Lokoja)

### Studying Bias in GANs through the Lens of Race

Vongani H Maluleke (University of California, Berkeley)\*; Neerja Thakkar (University of California, Berkeley); Tim Brooks (UC Berkeley); Ethan Weber (UC Berkeley); Trevor Darrell (UC Berkeley); Alexei A Efros (UC Berkeley); Angjoo Kanazawa (University of California Berkeley); Devin Guillory (UC Berkeley)

### Assessing Schistosomiasis transmission dynamics with heterogeneous intermediate host: A modeling study

Chidozie CW Chukwu (Wake Forest University)\*

### Set2Set Transformer: Towards End-to-End 3D Object Detection from Point Clouds

Yeabsira E Tessema (Korenti Craft Technologies)\*; Abel Mekonnen (Korenti Craft Technologies); Michael Desta (Korenti Craft Technologies); Selameab Demilew (Korenti Craft Technologies)

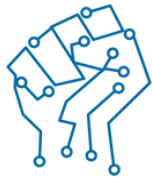
### Dissecting the Genre of Nigerian Music with Machine Learning Models

Sakinat O Folorunso (Olabisi Onabanjo university)\*

### Impact of Feedback Type on Explanatory Interactive Learning

Misgina Tsighe Hagos (University College Dublin)\*; Kathleen Curran (UCD); Brian Mac Namee (University College Dublin)





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Mon 28 Nov - 4:30 PM (CST Timezone)

### Image Segmentation of Radio Interferometric Images Using Deep Neural Networks

Sydil R Kupa (Rhodes University)\*; Marcellin M Atemkeng Teufack (Rhodes University); Kshitij Thorat (University of Pretoria); Oleg Smirnov (SKASA, Rhodes University)

### Prediction of the ability and motivation to adopt Reproductive Health Behavioural change using anonymized customer center audio data

Olubayo Adekanmbi (Data Science Nigeria)\*; Toyin Adekanmbi (Data Science Nigeria)

### Crowdsourcing-Powered Machine Learning Application for Fake Message Validation and Localized Instant Response Platform in Disaster Management

Olubayo Adekanmbi (Data Science Nigeria)\*

### Building Identification In Aerial Imagery using Deep learning

Proscovia Nakiranda (Stellenbosch University)\*; Trienko Grobler (Stellenbosch University)

### Privacy-Preserving Online Mirror Descent With Single-Sided Trust for Federated Learning

Olusola Odeyomi (North Carolina A & T State University)\*; Gergely Zaruba (University of North Texas)

### Segmentation of Tuta Absoluta's Damage on Tomato Plants: A Computer Vision Approach

Loyani K Loyani (The Nelson Mandela African Institution of Science and Technology)\*

### Pre-operative glioma grade prediction from multi-modal MR images based on an ensemble of deep learning models

Abdela A Mossa (University of Gondar and Emerald International College, Ethiopia)\*; Ulus Cevik (Cukurova University); Muhammed Hissien Bilal (Jigjiga University)

### Ethical Challenges Facing Data-Driven Policing: A Review

CHIBUZOR JOSEPH okocha (university of benin)\*

### End-to-End Multilingual Automatic Speech Recognition for Less-Resourced Ethiopian Languages

Martha Yifiru Tachbelie (Addis Ababa University)\*

### Cocoa Beans Classification Using Enhanced Image Feature Extraction Techniques and A Regularized Artificial Neural Network Model

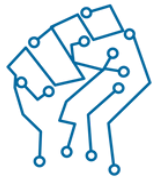
Eric Opoku (Savana Signatures)\*; Rose-Mary Owusua Mensah Gyening (Kwame Nkrumah University of Science and Technology); Obed Appiah (UENR)

### Separate and Extract a Mixed Audio Using Deep Learning

Wesagn D Chemma (MoF)\*

### Imitation from Observation With Bootstrapped Contrastive Learning

Medric Sonwa (University of Montréal)\*; Johanna Hansen (McGill University); Eugene Belilovsky (Mila)



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### Comparison of Classification Algorithms for Predicting Completeness of Measles Vaccination

Peter O Ohue (University of Ibadan)\*; Oluyemi Okunola (University of Medical Sciences Ondo)

### Deep Learning-Based Multi-Vehicle Tracking Model with Speed Estimator for the MLK Smart Corridor in Downtown Chattanooga, TN

Yasir Hassan (Center for Urban Informatics and Progress)\*

### INTEGRATING SOIL NUTRIENTS AND LOCATION WEATHER FOR CROP YIELD PREDICTION

Emeka Ogbuju (Federal University Lokoja)\*; Nkechi Dekanu (Federal University Lokoja); Ebenezer Oladipe (Federal University Lokoja)

### Towards Afrocentric AI

Ife Adebara (University of British Columbia)\*

### Evaluation of Convolutional Neural Network and Gradient Boosting Methods for Bug Severity Classification

Aminu Ahmad (Central South University, Changsha)\*

### Re-QGAN: an optimized adversarial quantum circuit learning framework

Anais Sandra Nguemto Guiawa (University of Tennessee Knoxville)\*

### COVID-19 Radio ASR: Analyzing community voices from radio broadcasts for public health planning, response and policy

Jonathan Mukiibi (Makerere University)\*

### COVID-19 Radio ASR: Analyzing community voices from radio broadcasts for public health planning, response and policy

Jonathan Mukiibi (Makerere University)\*

### Enabling Integration and Interaction for Decentralized Artificial Intelligence in Airline Disruption Management

Kolawole Ogunsina (N/A)\*

### Predicting the Level of Anemia among Ethiopian Pregnant Women using Homogeneous Ensemble Machine Learning Algorithm and Deploy on Cloud-based Framework

Belayneh E Endalamaw (University of Gondar)\*; Tesfamariam Abuhay (University of Gondar); Dawit Shibabaw (University of Gondar Ethiopia)

### Detecting gender bias in pre-trained language models for zero-shot text classification

Nile E Dixon (Northcentral University)\*

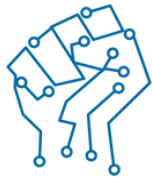
### Learning to Mitigate AI Collusion on E-Commerce Platforms

Eric Mibuari (Harvard University)\*; Gianluca Brero (Brown University); David Parkes (Harvard University); Nicolas Lepore (Harvard University)

### Temporal Cycle Consistency: for a Video-to-Video Translation

Kirubel Abebe Senbeto (Woldia University)\*





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### An instance segmentation approach for automatic insulator defect detection

ELDAD Antwi-Bekoe (AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND ENTREPRENEURIAL DEVELOPMENT (AAMUSTED))\*

### Unsupervised annotation of differences between genomic datasets

Eman Asfaw (iCog-Labs)\*

### Using Epidemic Multi-agent Synthetic Datasets for Predictions in Communication Networks: An LSTM Perspective

Chukwunonso H Nwokoye (Nnamdi Azikiwe University, Awka)\*; Chukwuemeka Etodike (NnamdiAzikiwe University, Awka); Queen Nkechi Chigbue (Nnamdi Azikiwe University)

### A Survey of Ensemble Learning: Concepts, Algorithms, Applications, and Prospects

Ibomoije Domor Mienye (University of Johannesburg)\*

### Simulating Health Time Series by Data Augmentation

Louis A Gomez (Stevens Institute of technology); Adedolapo A Toye (Stevens Institute of Technology); Robert Hum (Mcgill University); Samantha Kleinberg (Stevens Institute of Technology)\*

### Crop Recommendation for Precision Agriculture using Machine Learning techniques - Towards a More Sustainable Agriculture

Damilola Adegoke (Data Scientists Network)\*

### Gender Bias Evaluation in Luganda-English Machine Translation

Eric Peter Wairagala (Makerere University)\*

### Learning by Injection: Attention Embedded Recurrent Neural Network for Amharic Text-image Recognition

Tariku A Gelaw (Ethiopian Biotechnology Institute)\*; Birhanu Hailu Belay (Bahir Dar Institute of Technology); WELEKIROS GEBREHIWOT GEBRESLASIE (AI Institute)

### Enhancing Epidemiological Surveillance Systems Using Dynamic Modeling: A Scoping Review

ADEGBOYEGA MR ADEBAYO (NATIONAL OPEN UNIVERSITY NIGERIA)\*

### The Effects of Acoustic Features of Speech on the Performance of an Automatic Speaker Recognition

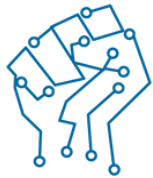
Tumisho B Mokonyane (University of South Africa)\*

### Speech Emotion Recognition

Joy Ojochide Bello (Federal University Lokoja)\*; Taiwo Kolajo (Department of Computer Science, Federal University Lokoja, Kogi State, Nigeria)

### Mobile-PDC: High-Accuracy Plant Disease Classification for Mobile Devices

Samiha Nalwooga (Stockholm University)\*; Henry Mutegeki (Makerere University)



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### MKA-Net: Multi-Kernel Attention Conv-Network

Abenezer G Girma (North Carolina A&T State University)\*;  
Nana Kankam B Gyimah (North Carolina Agricultural and  
Technical State University)

### Surface Defect Detection: A comparative analysis of Deep Learning-based Frameworks

Nana Kankam B Gyimah (North Carolina Agricultural and  
Technical State University)\*; Abenezer G Girma (North  
Carolina A&T State University)

### Stronger is not better: Better Augmentations in Contrastive Learning for Medical Image Segmentation

Azeez Idris (Iowa State University)\*; Abdurahman Ali  
Mohammed (Iowa State University); Samuel Fanijo (Iowa  
State University)

### Deepware: Imaging performance counters with deep learning to detect ransomware

Gaddisa Olani Ganfure (Dire Dawa University)\*; Yuan-Hao  
Chang (Academia Sinica)

### DEEP LEARNING BASED AFAAN OROMO HATE SPEECH DETECTION

Gaddisa Olani Ganfure (Dire Dawa University)\*

### Domain-Specific Lexicon-Based Sentiment Analysis using Contextual Shifter Patterns

Shamsuddeen Mr Muhammad (Bayero University, Kano)\*

### FacEDiM: A Face Embedding Distribution Model for Few-Shot Biometric Authentication of Cattle

Meshia Cédric Oveneke (Fit-For-Purpose Technologies)\*;  
Rucha Vaishampayan (Fit-For-Purpose Technologies);  
Deogratias Lukamba Nsadisa (Fit-For-Purpose Technologies);  
Jenny Ambukienyi Onya (Fit-For-Purpose Technologies)