

**5th International Conference on ICT for Development for Africa
October 26-28, Bahir Dar, Ethiopia**

**Day 1: Hybride
Thursday October 26, 2023**

<i>Time</i>	<i>Title/Task</i>	<i>Presenter</i>
08:00 – 8:30	Registration (Joining Zoom)	Participants
08:31 – 08:40	Conference Briefing	Dr. Esubalew Alemneh
08:41 – 08:45	Message from Deputy Scientific Director for Research and Community Service, Bahir Dar Institute of Technology Bahir Dar University	Dr. Mekuanint Agegnehu
08:46 – 08:50	Welcome Speech	Prof Ethiopia Nigussie
08:51 - 09:35	Keynote Speech I: 5G Testbeds the Innovation Vehicle for Smart Cities	Prof Jari Handelberg
09:36 -10:15	Keynote Speech II: ICT and Fresh Water lake Ecosystems and Services	Prof Nils Gustav Andreas
10:16 -10:30	Coffee Break	
10:31 – 11:15	Keynote Speech III: Building our Sustainable Future through Science and Computing	Dr. Solomon Assefa
Paper Presentations		
11:16 - 11:35	Mutual Coupling Reduction for Multiband Phased Array Antenna using Metamaterial Surface for Millimeter Wave Communication	Dr. Mulugeta Atlabachew
11:36 - 11:55	Visual Acuity Classification Using Ensemble Machine Learning Algorithms: With Explainable Approach	Dr. Abdulkerim Mohammed
11:56 - 12:15	Application of Machine Learning Algorithms for Pneumonia Detection and Classification	Mr. Hamza Shukir
12:16 - 12:35	Evaluating the effectiveness of hybrid features in fake news detection on social media	Mr. Tadesse Kebede
12:36 - 12:55	Habesha Women’s Dress Embroidery Design Identification Using an Ensemble Feature Extraction Approach	Mr. Assaminew Gizaw
12:56 – 14:30	Conference Lunch	
Parallel Sessions (3 Virtual Sessions)		
Parallel Session I		
Track 1: Intelligent Systems and Data Science		
<i>Time</i>	<i>Topic</i>	<i>Presenter</i>
14:31 – 14:45	An AI Contribution to African Economic Development through Mother Tongue Education - a Linguistic Evaluation of an African-based AI Mathematics Tutoring Bot	Laurie Butgereit
14:46 – 15:00	Small Screws Detection using Machine Vision	Getachew A Ambaye
15:01 –15:15	Software Risk Prediction at Requirement and Design Phase : An Ensemble Machine Learning Approach	Yibeltal Assefa Zelelew
15:16 - 15:30	Machine Learning Based Delivery Date Prediction For Child Birth	Yibeltal Assefa
15:31 - 15:45	Test case generation from quality attribute scenarios using machine learning approach	Abebaw Worku
15:46 – 16:00	Coffee Break	
16:01 - 16:15	Automatic Medical Image diagnosis for lung diseases using deep transfer learning	Irada Mwendo

16:16 - 16:30	Anaphoric Term Classification and Resolution Model for Amharic Pronouns: Using Deep Learning Technique	Siraye Mekonnen
16:31 - 16:45	Classification and Prioritization of Requirements Smells Using Machine Learning Techniques	Fekerte Berhanu Tadle
16:46 - 17:00	Toward explainable Artificial intelligence for Pneumonia and tuberculosis classification from Chest X-ray	Getamesay Haile Dagnaw
17:01 - 17:15	Detecting Fraud in Motor Insurance Claims Using XGBoost Algorithm with SMOTE	David Gichohi Maina
Parallel Session II Track 1: Intelligent Systems and Data Science and Track 5: Natural Language Processing		
Time	Topic	Presenter
14:31 – 14:45	Wind power Forecasting Model using Deep Learning Approach	Seblewongale Ayene
14:46 – 15:00	A Real-Time Obstacle Detection And Classification System For Assisting Blind And Visually Impaired People Based On Yolo Model	Yesuneh Getachew
15:01 – 15:15	Multitask Deep Learning Approach for Habesha Fashion Cloth Recognition and Classification	Yohannes Abinet
15:16 - 15:30	A Knowledge-Based System to Predict Crime from Criminal Records in the case of Hossana Police Commission	Betelhem Zewdu
15:31 - 15:45	Hybrid Deep-Machine Learning Based Performance Comparison for Soybean Plant Disease Identification	Yirga Yayeh
15:46 – 16:00	Coffee Break	
16:01 - 16:15	Design Amharic Text Sentiment Analysis Model Using Machine Learning Techniques. In Case of restaurant reviews.	Birku Gedif
16:16 - 16:30	COSMIC-Functional Size Classification of Agile Software Development: Deep Learning Approach	Yohannes Sefane
16:31 - 16:45	Ge'ez-English Bi-directional Neural Machine Translation Using Transformer	Yirga Yayeh
16:46 - 17:00	Machine Learning Based Soil-type Classification	Yirga Yayeh
17:01 - 17:15	Hadiyyissa Automatic Speech Recognition using Deep Learning Approach	Amin Tuni Gure
Parallel Session III Track 2: Wireless Communications & Emerging Networking, Track 4: Security, Track 5: Natural Language Processing and Track 6: Information System		
Time	Topic	Presenter
14:31 – 14:45	Bi-directional Machine Translation between Amharic and Khimtagne using Deep Learning	Adane K Chekole
14:46 – 15:00	Geez Part of Speech Tagging Using Deep Learning Approaches	Abdulkerim Mohammed
15:01 – 15:15	Multimodal Cyberbullying Detection Using Deep Learning Techniques: A Review	Immaculate Ms Musyoka
15:16 - 15:30	Machine Learning-Based Categorization Of Racism In Amharic Text Using Multi-Class Classification	Abebe Desie
15:31 - 15:45	Data-Driven Decision-Making and Its Impacts on Education Quality in Developing Countries: A Systematic Review	Zelalem Asfaw
15:46 – 16:00	Coffee Break	

<i>16:01 - 16:15</i>	Investigating the Benefits of Using Non-Orthogonal Multiple Access for double connction LiFi-RF Networks.	Ermias Kassahun
<i>16:16 - 16:30</i>	Performance Analysis of SDN with a Hybrid Data Plane of MPLS and SDN	Belayneh Kebie Teshome
<i>16:31 - 16:45</i>	Performance Analysis of POCO Framework under Failure Scenario in SDN-Enabled Controller Placement	Sefinew Getenet
<i>16:46 - 17:00</i>	Controller-Targeted DDoS Attack Detection and Mitigation in Software-Defined Internet of Vehicles (SD-IoV)	Behaylu T. Alemu
<i>17:01 - 17:15</i>	Ensemble Learning for Encrypted Malware Detection and Classification	Sileshi Nibret Zeleke
<i>Closing Remarks / ICT4DA-2023 Organizing Committee/</i>		

<i>Moderator</i>
Biniam Behailu
Dr. Michael Melse
Dr. Ethiopia Nigussie
Dr. Tesfa Tegegne
Dr Fisseha Mekuria
Dr. Mohammed Abebe
<i>Chair person</i>
Dr. Tesfa Tegegne

Dr. Mohammed Abebe

Chair person

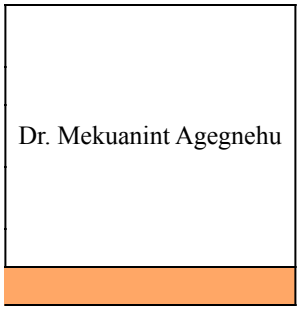
Dr. Abdulkerim
Mohammed

Dr. Michael Melse

rocessing and

Chair person

Dr. Esubalew Alemneh



Dr. Mekuanint Agegnehu