

2024 International Conference on Next Generation Computing Applications (NextComp 2024)

**Mauritius
24-26 October 2024**



**IEEE Catalog Number: CFP24NEY-POD
ISBN: 979-8-3315-1741-0**

**Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP24NEY-POD
ISBN (Print-On-Demand):	979-8-3315-1741-0
ISBN (Online):	979-8-3315-1740-3

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

List of Papers

Paper Title and Authors

- Using GPT-4 to Tutor Python Programming in Shona and Ndebele in Zimbabwe.....1
Laurie Butgereit, Helper Zhou
- »Engagement by Goals« A Digital Platform for Goal-Oriented Volunteering.....6
Johannes Schönböck, Josef Altmann, Birgit Pröll, Wieland Schwinger, Elisabeth Kapsammer, Werner Retschitzegger, Nikolas Goblirsch-Urban, Marianne Lechner, Christoph Angster
- Drug Target Interaction prediction using Variational Quantum classifier.....14
Dassen Sathan, Shakuntala Baichoo
- Leveraging ML to Detect Fraudulent Customs Declaration: A Case of Logistic Regression and LightGBM Algorithms.....21
Innocent Chilomo, Bennett Kankuzi
- Mauvote: A Novel Mobile Electronic Voting System Using Blockchain.....27
Junaid Bin Asad Edo, Roopesh Kevin Sungkur, Hauke Precht, Skady Rudolph
- A Review of PFCP Cyber Attacks in 5G SA for Robotic Telesurgery Services.....33
Ntshuxeko Makondo, Errol Baloyi, Hlabishi I. Kobo, Topside E. Mathonsi
- Improving the classification of sentiments towards Covid-19 vaccines using semantic enrichment and emojis.....40
Karabo Johannes Ntwaagae, Edwin Thuma, Gontlafetse Mosweunyane
- Training Tacotron 2 for Text-to-Speech Synthesis in Kreole Language: Methodology and Audio Processing.....46
Kousraj Ujoodha, Baby Gobin-Rahimbux, Nuzhah Gooda Sahi
- Effective Detection of Fileless Malware: A Review and Comparative Analysis of Detection Techniques.....52
Parlan Obeegadoo, Girish Bekaroo
- Characteristics of an AI Tutor to Prepare Students in Technical Subjects for the new Society 5.0.....59
Laurie Butgereit, Amar Kumar Seem
- Transformative Botanical Visualization: Exploring the Application of Augmented Reality to Visualize Flowers.....65
Hanshee Fowdar, Girish Bekaroo
- AI-based Malware Threat Prediction through CNN-SVM Ensemble.....71
Mufaro Shoniwa, Karel Veerabudren, Mrinal Sharma
- YOLO-Based Techniques for the Crown-of-Thorns Starfish Detection: A Comparative Study.....77

Rakshita Ramdharee, Zahra Mungloo-Dilmohamud

Securing V2X-Enabled Unmanned Vehicles: A Comprehensive Taxonomy of Cyber Threats and Countermeasures.....82

Amar Seeam, Visham Ramsurrun

Using Game Theory to Prioritize Goals in Requirements Engineering.....88

Isaac Munthali, Bennett Kankuzi

Defending Against XML External Entity (XXE) Attacks: A Review and Comparative Analysis of Prevention Mechanisms.....93

Bhavesh Hulloowan, Girish Bekaroo

RXSS Protect: A Browser Extension for Detection of Reflected Cross-Site Scripting Attacks in Real-Time Using Machine Learning.....99

Yaachna Rawoteea, Girish Bekaroo

Smart Fish Feeding in IoT-based Aquarium: A Comprehensive Approach Integrating Computer Vision, Machine Learning and Sensor Technology.....106

Ryan Cassy, Girish Bekaroo

Weed Detection in Smart Agriculture Application in the 5G Smart Country Project.....112

Rami Chahin, Ali Akyol, Jorge Marx Gómez

A Carpooling System To Ease Traffic In Mauritius.....118

Vidushi Lukhoo, Raj Kishen Moloo

Promoting Physical Activity and Social Engagement in Older Adults through Immersive Exergaming: A Comprehensive Review.....124

Shehzad Jaunbuccus, Roushdatt Elaheebocus

Enhanced Liner Shipping Network Design using Ant Colony Optimisation.....132

Nirmal Rampersand, Oomesh Gukhool