Table of Contents

Part I Conference Schedule Summary ................................................................. 2

Part II Keynote Speeches ....................................................................................... 4
  Keynote Speech 1: Privacy Protection in Video Live Streaming ............................ 4
  Keynote Speech 2: Personal Authentication Systems with Graphics ..................... 5
  Keynote Speech 3: Toward INTERBEING in the Metaverse: On the Symbiosis between Internet and Human Being ................................................................. 6

Part III Poster Session ............................................................................................ 7
  Poster Presentations ............................................................................................... 7
  List of Posters .......................................................................................................... 7

Part IV Oral Presentations ....................................................................................... 8
  General Guidelines .................................................................................................. 8
  Session 1: Electronics Technology and VLSI ....................................................... 10
  Session 2: Internet Technology and Signal Processing ......................................... 11
  Session 3: Information Communication and Communication Networks ............... 12

Part V Conference Venue ..................................................................................... 14

Part VI Acknowledgements .................................................................................... 16

* The Program is used for CECNet 2023 Academic Exchange Only
Part I Conference Schedule Summary

Friday, November 17, 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Schedule</th>
<th>Location/Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-19:00</td>
<td>Physical Registration</td>
<td>Lobby of Regency Art Hotel</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>MS Teams Testing</td>
<td><a href="http://www.academicconf.com/teamslink?confname=cecnet2023">http://www.academicconf.com/teamslink?confname=cecnet2023</a></td>
</tr>
</tbody>
</table>

Notice (for offline participants):

1. Please show us the acceptance letter or paper ID for registration;
2. Please take the name card during conference, Macao Pass\(^1\) for meals and field visit tickets while joining the field visit.

Saturday, November 18, 2023

**Ballroom III, Regency Art Hotel**


<table>
<thead>
<tr>
<th>Time</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:05</td>
<td>Keynote Speeches are chaired by:</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Gi-Chul Yang, Mokpo National University, South Korea</em></td>
</tr>
<tr>
<td>09:05-09:45</td>
<td>Keynote Speech 1: Privacy Protection in Video Live Streaming</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Chi-Man Pun, University of Macau, China</em></td>
</tr>
<tr>
<td>09:45-10:25</td>
<td>Keynote Speech 2: Personal Authentication Systems with Graphics</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Gi-Chul Yang, Mokpo National University, South Korea</em></td>
</tr>
<tr>
<td>10:25-10:50</td>
<td>Group Photo &amp; TEA BREAK</td>
</tr>
<tr>
<td></td>
<td>between Internet and Human Being</td>
</tr>
<tr>
<td></td>
<td><em>Prof. Martin Maier, Institut National de la Recherche Scientifique (INRS), Canada</em></td>
</tr>
<tr>
<td>11:30-12:00</td>
<td>Poster Presentations</td>
</tr>
<tr>
<td>12:00-14:00</td>
<td>LUNCH BREAK <em>(A Pousada Café 玲瓏閣餐廳)</em></td>
</tr>
<tr>
<td>14:00-17:25</td>
<td>Oral Session 1: Electronics Technology and VLSI</td>
</tr>
<tr>
<td>18:30</td>
<td>Gather at the Lobby of Regency Art Hotel, <strong>Set off on time at 18:30</strong> to Macao Tower</td>
</tr>
</tbody>
</table>

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\(^1\) Macao Pass will be provided during registration for dinner on November 19th and Lunch on November 20th. Macao Pass can be used in Public Transit, Convenience Store, Supermarket, Café and Self-service Vending Machine in Macao.
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:30-21:00</td>
<td>Buffet Dinner at Macao Tower (With Buffet Dinner Ticket)</td>
</tr>
<tr>
<td>21:00</td>
<td>Gather at the Ground Floor of Macao Tower, Set off on time at 21:00, Back to Regency Art Hotel</td>
</tr>
<tr>
<td></td>
<td><strong>Sunday, November 19, 2023</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Ballroom III, Regency Art Hotel</strong></td>
</tr>
<tr>
<td></td>
<td><em>MS Teams Link:</em> <a href="http://www.academicconf.com/teamslink?confname=cecnet2023">http://www.academicconf.com/teamslink?confname=cecnet2023</a></td>
</tr>
<tr>
<td>08:30-12:10</td>
<td>Oral Session 2: Internet Technology and Signal Processing</td>
</tr>
<tr>
<td>12:10-14:00</td>
<td>LUNCH BREAK (<em>A Pousada Café 玲瓏閣餐廳</em>)</td>
</tr>
<tr>
<td>14:00-17:30</td>
<td>Oral Session 3: Information Communication and Communication Networks</td>
</tr>
<tr>
<td></td>
<td><strong>Monday, November 20, 2023</strong></td>
</tr>
<tr>
<td></td>
<td>Macao City, China</td>
</tr>
<tr>
<td>09:00</td>
<td>Gather at the Lobby of Regency Art Hotel, Set off on time at 09:00</td>
</tr>
<tr>
<td>09:00-16:00</td>
<td>One Day Field Visit of Macao City (with Field Visit Ticket)</td>
</tr>
<tr>
<td>16:00</td>
<td>Gather at the Ground floor of Venetian Macao, Set off on time at 16:00, Back to Regency Art Hotel</td>
</tr>
</tbody>
</table>
Part II Keynote Speeches

Keynote Speech 1: Privacy Protection in Video Live Streaming

Prof. Chi-Man Pun

Computer and Information Science, University of Macau, China

Biography: Chi-Man Pun received his Ph.D. degree in Computer Science and Engineering from the Chinese University of Hong Kong in 2002, and his M.Sc. and B.Sc. degrees from the University of Macau. He had served as the Head of the Department of Computer and Information Science, University of Macau from 2014 to 2019, where he is currently a professor, and in charge of the Image Processing and Pattern Recognition Laboratory. He has investigated many externally funded research projects as PI, and has authored/co-authored more than 200 refereed papers in many top-tier journals and conferences. He also has two US Patents granted and is the recipient of the Macao Science and Technology Award 2014. Dr. Pun has served as the General Chair/Co-chair and the Program/Local Chair for many international conferences. He has also served as the SPC/PC member for several top CS conferences such as AAAI, CVPR, ICCV, ECCV, etc. His research interests include Image Processing and Pattern Recognition; Multimedia Information Security, Forensic and Privacy; Adversarial Machine Learning and AI Security, etc.

Abstract: With the prevailing of live video streaming, establishing an online pixelation method for privacy-sensitive objects is an urgency. Caused by the inaccurate detection of privacy-sensitive objects, simply migrating the tracking-by-detection structure into the online form will incur problems in target initialization, drifting, and over-pixelation. To cope with the inevitable but impacting detection issue, we propose a novel Privacy-sensitive Objects Pixelation (PsOP) framework for automatic personal privacy filtering during live video streaming. Leveraging pre-trained detection networks, our PsOP is extendable to any potential privacy-sensitive objects pixelation. Employing the embedding networks and the proposed Positioned Incremental Affinity Propagation (PIAP) clustering algorithm as the backbone, our PsOP unifies the pixelation of discriminating and indiscriminating pixelation objects through trajectories generation. In addition to the pixelation accuracy boosting, experiments on the streaming video data we built show that the proposed PsOP can significantly reduce the over-pixelation ratio in privacy-sensitive object pixelation.
Keynote Speech 2: Personal Authentication Systems with Graphics

**Prof. Gi-Chul Yang**

**Mokpo National University, South Korea**

**Biography:** Gi-Chul Yang received his M.S. degree from Department of Computer Science, the University of Iowa, USA in 1986 and Ph.D. degree in Computer Science and Telecommunications Program from the University of Missouri, USA in 1993. Currently, he is a Professor at Mokpo National University, where he has been working since September 1993. He was also a Director of Information & Computing Institute, School of Information Engineering and University Library at Mokpo National University. His research interests include Artificial Intelligence (AI) and Human-Computer Interaction (HCI). He published the research articles more than 200 and got several patents. He was working on personal authentication schemes and published papers in various Journals including ‘TIM: Secure and Usable Authentication for Smartphones’ to be published in Journal of Information Security and Applications. He is, currently, pursuing to develop more secure and user-friendly authentication system using EEG data and AI technique. He was a Visiting Scholar at Heriot-Watt University, University of Hamburg, University Institute of Lisbon and University of Porto in 2002, 2015 and 2022 respectively. He collaborated with professors at Linkoping University, University of Zurich, University of Missouri, University of Auckland, Drexel University, Queen Mary University in London, Surrey University and University of Hawaii. He is an author of several books (written in Korean) and was an editor of Springer’s Transactions of Engineering Technologies. He gave keynote speeches and served as a committee member of various international conferences including a conference chair and co-chair. He is, also, an editorial board member of International Journals such as American Journal of Computer Science and Technology (AJCST) and Journal of Image and Graphics (JOIG).

**Abstract:** Currently, the most commonly used personal authentication method is a text-based password system. In this talk, several graphical password systems that can replace text-based password systems will be introduced, and a new personal authentication system using a graphical password system will be introduced. The existing text-based authentication solutions bring in the trade-off issue between security and usability. The main reason is short passwords are easy to remember but not secure enough as they are vulnerable to password guessing or shoulder surfing attacks. In contract, long passwords can ensure security, but they raise usability issues due to the difficulty of memorising, recalling, and inputting passwords. In this talk, number of image-based authentication solutions will be proposed. The next-generation personal authentication system to be introduced in this talk has strong security and high usability.

**Keywords:** Authentication, Security, Graphical Password

**Acknowledgements:** This work was supported by Mokpo National University
Keynote Speech 3: Toward INTERBEING in the Metaverse: On the Symbiosis between Internet and Human Being

Prof. Martin Maier

Institut National de la Recherche Scientifique (INRS), Montréal, Canada

Biography: Martin Maier is a full professor with the Institut National de la Recherche Scientifique (INRS), Montréal, Canada. He was educated at the Technical University of Berlin, Germany, and received MSc and PhD degrees both with distinctions (summa cum laude) in 1998 and 2003, respectively. He was a recipient of the two-year Deutsche Telekom doctoral scholarship from 1999 through 2001. In 2003, he was a postdoc fellow at the Massachusetts Institute of Technology (MIT), Cambridge, MA. He was a visiting professor at Stanford University, Stanford, CA, 2006 through 2007. He was a co-recipient of the 2009 IEEE Communications Society Best Tutorial Paper Award. Further, he was a Marie Curie IIF Fellow of the European Commission from 2014 through 2015. In 2017, he received the Friedrich Wilhelm Bessel Research Award from the Alexander von Humboldt (AvH) Foundation in recognition of his accomplishments in research on FiWi-enhanced mobile networks. In 2017, he was named one of the three most promising scientists in the category “Contribution to a better society” of the Marie Sklodowska-Curie Actions (MSCA) 2017 Prize Award of the European Commission. In 2019/2020, he held a UC3M-Banco de Santander Excellence Chair at Universidad Carlos III de Madrid (UC3M), Madrid, Spain. He is co-author of the book “Toward 6G: A New Era of Convergence” (Wiley-IEEE Press, January 2021) and author of the sequel book “6G and Onward to Next G: The Road to the Multiverse” (Wiley-IEEE Press, February 2023).

Abstract: For all the fascination with the Metaverse, the term has no consensus definition or consistent description. Most industry leaders define it in the manner that fits their own worldviews and/or capabilities of their companies. Notwithstanding, it is fair to assume that there can be only one Metaverse – just as there is “the Internet,” not “an Internet” or “the Internets.” In virtual worlds, it is common practice to talk to strangers with no introduction whatsoever and invite them to join efforts in pursuit of a task, thereby creating a sense of shared community and an ideal community-individual relationship. In this keynote, we will report on our work on cyber-physical-social systems in the emerging Metaverse for integrating human, artificial, and natural intelligence with the help of digital twins and Web3 blockchain technologies. In particular, we outline our ideas on the virtual society’s symbiosis between Inter(net) and (human) being in the future Metaverse enabled by a stronger and more resilient nexus between real and virtual worlds for transferring the value created in these digital realms into our own real world, giving rise to the powerful concept of Interbeing, a word that is not in the dictionary yet.
Part III Poster Session

Materials Provided by the Conference Organizer:
✧ X Racks & Base Fabric Canvases (60cm×160cm, see the figure)
✧ Adhesive Tapes or Clamps

Materials Provided by the Presenters:
✧ Home-made Posters
✧ Posters printed by CECNet 2023 Committee

Requirements for the Posters:
✧ Materials: not limited, can be posted on the Canvases
✧ Size: 60cm×160cm
✧ Horizontal Head: please make the conference name ‘CNT 2023’ and the paper number ‘CNT****’ as the head of the poster in order to make all the posters unified.

Poster Presentations

Time: 11:30-12:00 Saturday, November 18, 2023
Conference Room: Ballroom III, 1F

List of Posters

<table>
<thead>
<tr>
<th>Poster ID</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNT3325</td>
<td>Building an Immersive Augmented Reality Game System for E-Health and E-Learning: Technical Framework and Architecture</td>
<td>Cecilia Cheng, Department of Psychology, The University of Hong Kong, China</td>
</tr>
<tr>
<td>CNT3344</td>
<td>Study of A Stars-Parallel Hyperchaos Laser Synchronization LAN with Two Type of Erbium-Doped Fiber Lasers</td>
<td>Yuzheng Lu, Electronic Engineering School, Nanjing Xiaozhuang University, China</td>
</tr>
<tr>
<td>CNT3352</td>
<td>All-Optical Sequence Matching (AOSM) Enabled All-Optical Switching for Optical Data Center Networking</td>
<td>Xin Li, School of Electronic Engineering, Beijing University of Posts and Telecommunications, Beijing, China</td>
</tr>
<tr>
<td>CNT3354</td>
<td>Simplified Monocular Ranging Anomalous Behaviour Detection Model for Security Monitoring Applications</td>
<td>Ping Wang, Chongqing University of Posts and Telecommunications, China</td>
</tr>
<tr>
<td>CNT3383</td>
<td>Magnetic Field-insensitive Anapole State in Gyromagnetic Media</td>
<td>Yujie Zhang, School of Information Science and Engineering, Shandong University, China</td>
</tr>
<tr>
<td>CNT3391</td>
<td>Control of Electronic States at the Interface of Semiconductor Nanocomposites and Its Application in Fuel Cells</td>
<td>Junjiao Li, Department of Electronic and Engineering, Nanjing Vocational Institute of Mechatronic Technology, China</td>
</tr>
</tbody>
</table>
Part IV Oral Presentations

General Guidelines

- All presentation times are shown in China Standard Time (GMT+8:00);
- Duration for Invited Oral Presentation: 25 Minutes of Presentation including 3-5 Minutes of Q&A;
- Duration for Regular Oral Presentation: 15 Minutes of Presentation including 2-3 Minutes of Q&A;
- All presenters are requested to reach the Session Room 15 minutes prior to the schedule time and complete their presentation on time;
- Presenters should prepare Power Pointer or PDF Files for Presentation with Paper ID (CNT****) marked in the last page;
- Signed and stamped presentation certificate would be issued after presentation.

Offline Oral Presentation Guidelines

Devices Provided by the Conference Organizer:
- Laptops (with MS-Office & Adobe Reader)
- Projectors & Screen: Ratio 4:3
- Laser Sticks
- Microphones
- Please send us the PowerPoint once it is ready and have the PPT back up in a U-disk. For presenters who do not send the PowerPoint, please save it in the laptop of the corresponding session 15 mins in advance. Kindly tell the Session Chair (before the start of your session) that you are presenter.

Online Oral Presentation Guidelines

- Online Oral Presentation will be conducted via Microsoft Teams Meeting.
- If a presenter cannot show up on time or has problem with internet connection, the session chair has the right to rearrange his/her presentation, and let the next presentation start.

Best Oral Presentations Selection Guidelines

Selection Criteria:
ONE best presentation will be selected from EACH session based on the following criteria:
- Research Quality
- Presentation Performance
- Presentation Language
- Interaction with Listeners
- PowerPoint Design
- Effective Communications

Selection Procedure:
- An assessment sheet will be delivered to listeners before the session.
- Write the numbers of two best presentations and submit the filled assessment sheet (with the
listener’s name and signature) to the Session Chair before the session termination.

✓ The Session Chair will count the votes for each presentation and name the winner based on the maximal number of votes. The Session Chair has three votes but can use only one in favor of his/her own presentation (if any). To avoid any conflict of interests, only registered listeners are entitled to vote.

**Nature of the Award:**
✓ This award consists of free registration to the next conference CECNet 2024 and a certificate.
✓ The awards will be announced at the official website after the conference.

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**Assessment Sheet Sample**

**CECNet 2023 Oral Presentation Assessment**

Dear participants,

After carefully listening to the presentations of this session, please kindly recommend two excellent Oral Presentations with reference to the following evaluation criteria.

The Session Chair will count the votes from each presentation and select ONE Best Oral Presentation in this session. If there is a tie, the Session Chair will make the final decision.

The winner will be announced at the official website after the conference.

**You can refer to the following Criteria:**

<table>
<thead>
<tr>
<th>Items</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Right, Logical, Original, Well-Structured</td>
</tr>
<tr>
<td>Language</td>
<td>Standard, Clear, Fluent, Natural</td>
</tr>
<tr>
<td>Performance</td>
<td>Spirited Appearance, Dress Appropriately, Behaves Naturally</td>
</tr>
<tr>
<td>PPT</td>
<td>Layout, Structure, Typeset, Animation, Multimedia</td>
</tr>
<tr>
<td>Reaction</td>
<td>Build a Good Atmosphere, Speech Time Control Properly</td>
</tr>
</tbody>
</table>

**Please write down paper ID and give reasons for your recommendation:**

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluated by: _________ (Paper ID: ___________)

**Note:** When the session finished, please fill it out and give it to the Session Chair so that the Best Oral Presentation in this session can be selected.
# Session 1: Electronics Technology and VLSI

**Time:** 14:00-17:25 Saturday, November 18th, 2023  
**Conference Room:** Ballroom III, 1F  
**Session Chair:** Dr. Wenqiang Pu, Shenzhen Research Institute of Big Data, China  

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>CNT3330</td>
<td>Hermetic Interlayer Interconnection Technology Based on SAC305 Solder Paste</td>
<td>Dr. Ziyuan Wang, School of Electronic Science &amp; Engineering, Southeast University, China</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>CNT3359</td>
<td>Acoustic Multichannel Transports of Valley Edge States in Bilayer Sonic Crystals</td>
<td>Prof. Hai Yang, School of Physics Science and Technology, Kunming University, China</td>
</tr>
<tr>
<td>14:30-14:55</td>
<td>CNT3317 (Invited)</td>
<td>Optimistic Thompson Sampling for No-Regret Learning in Unknown Games</td>
<td>Dr. Wenqiang Pu, Shenzhen Research Institute of Big Data, China</td>
</tr>
<tr>
<td>14:55-15:20</td>
<td>CNT3285 (Invited)</td>
<td>Adaptive State Estimation of Intelligent Connected Vehicles</td>
<td>Dr. Yan Wang, School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore</td>
</tr>
<tr>
<td>15:20-15:35</td>
<td>CNT3382</td>
<td>Outage Performance of Dual-Hop Cellular Network with Underlaid V2V Communications</td>
<td>Mr. Fan Wu, Hefei University of Technology, China</td>
</tr>
<tr>
<td>15:35-16:00</td>
<td>CNT3311 (Invited)</td>
<td>Integrated Silicon Spectrometer</td>
<td>Prof. Ang Li, Key Laboratory of Radar Imaging and Microwave Photonics, Ministry of Education Nanjing University of Aeronautics and Astronautics, China</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td></td>
<td>Coffee Break</td>
<td></td>
</tr>
<tr>
<td>16:15-16:40</td>
<td>CNT3314 (Invited)</td>
<td>Intelligent Assembly Scheduling of Large Laser Devices Based on Neural Network</td>
<td>Dr. Zhao Xiong, Laser Fusion Research Center, China</td>
</tr>
<tr>
<td>16:40-16:55</td>
<td>CNT3319</td>
<td>Personalization or Popularity? A Matter of Arrow's Impossibility Theorem</td>
<td>Mr. Hao Wang, Ratidar Technologies Co. Ltd, China</td>
</tr>
<tr>
<td>16:55-17:10</td>
<td>CNT3333</td>
<td>Equivalent Circuit Simulation of Transverse Nonlinear Vibration of a Single-axis Bogie</td>
<td>Mr. Feng Hao, School of Mechatronic Engineering, Lanzhou Jiaotong University, China</td>
</tr>
<tr>
<td>17:10-17:25</td>
<td>CNT3341</td>
<td>Performance of the Modified MSE Upper Bounds under Packet Loss and the gfGn Surroundings for the PTP Scenario</td>
<td>Prof. Monika Pinchas, Department of Electrical and Electronic Engineering, Ariel University, Israel</td>
</tr>
</tbody>
</table>
### Session 2: Internet Technology and Signal Processing

**Time:** 08:30-12:10 Sunday, November 19th, 2023  
**Conference Room:** Ballroom III, 1F  
**Session Chair:** Prof. Kaicheng Li, Huazhong University of Science and Technology, China  

<table>
<thead>
<tr>
<th>Time</th>
<th>CNT</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30-08:55</td>
<td>CNT3287</td>
<td><strong>A VMD Harmonic Detection Method Based on Improved SVD Denoising</strong></td>
<td>Prof. Kaicheng Li, Huazhong University of Science and Technology, China</td>
</tr>
<tr>
<td>08:55-09:10</td>
<td>CNT3374</td>
<td><strong>Self-supervised Sparse Direct Visual Odometry with Half-Geometric Correspondence Network</strong></td>
<td>Mr. Tenglong Zhang, Beijing Information Science &amp; Technology University, China</td>
</tr>
<tr>
<td>09:10-09:25</td>
<td>CNT3375</td>
<td><strong>Dynamic Talking-Head Generation with Speech Emotion Recognition and Intensity Detection</strong></td>
<td>Dr. Chen Fu, Graduate School of Science and Engineering, Hosei University, Japan</td>
</tr>
<tr>
<td>09:25-09:50</td>
<td>CNT3369</td>
<td><strong>Design and Analysis of the Low-PAPR Synchronization Sequences for Unlicensed Band</strong></td>
<td>Prof. Alexander Maltsev, Nizhny Novgorod State University, Nizhny Novgorod, Russia</td>
</tr>
<tr>
<td>09:50-10:05</td>
<td>CNT3316</td>
<td><strong>Multi-skeleton Joint Behavior Recognition Method based on a Dual-stream Network</strong></td>
<td>Dr. Hongda Mou, College of Artificial Intelligence, Chongqing Technology and Business University, China</td>
</tr>
<tr>
<td>10:05-10:30</td>
<td>CNT3212</td>
<td><strong>Hyper Cutter Location Data-based Robot Interface for Standardization</strong></td>
<td>Prof. Fusaomi Nagata, Graduate School of Engineering, Sanyo-Onoda City University, Japan</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td></td>
<td><strong>Coffee Break</strong></td>
<td></td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>CNT3356</td>
<td><strong>Improving Facial Emotional Recognition Using Convolution Neural Network with Minimal Layer</strong></td>
<td>Mr. Rogerant Tshibangu, Electrical Engineering Department, Mangosuthu University of Technology, South Africa</td>
</tr>
<tr>
<td>11:00-11:15</td>
<td>CNT3235</td>
<td><strong>Network Model Based on the Theory of the Strong Product Graphs</strong></td>
<td>Dr. Weimin Qian, College of Computer Science, Qinghai Normal University, China</td>
</tr>
<tr>
<td>11:15-11:40</td>
<td>CNT3199</td>
<td><strong>Research on Integrated Energy Scheduling Based on Virtual Power Plant</strong></td>
<td>Prof. Tao Zhang, University of Science and Technology Beijing, China</td>
</tr>
</tbody>
</table>
11:40-11:55  CNT3315  Mitigating Position Bias with Regularization for Recommender Systems  
Mr. Hao Wang, Ratidar Technologies Co. Ltd, China

11:55-12:10  CNT3226  Research on Multi-strategy Improved Sparrow Search Optimization Algorithm  
Prof. Teng Fei, Institute of Information Engineering, Tianjin University of Commerce, China

Session 3: Information Communication and Communication Networks

Time: 14:00-17:30 Sunday, November 19th, 2023  
Conference Room: Ballroom III, 1F  
Session Chair: Dr. Tao Yang, Beijing University of Posts and Telecommunications, China  
Online Room Link: http://www.academicconf.com/teamslink?confname=ceccnet2023

14:00-14:25  CNT3286 (Invited)  WDM Optical Network Monitoring Based on Digital Optical Labels  
Dr. Tao Yang, State Key Laboratory of Information Photonics and Optical Communication, Beijing University of Posts and Telecommunications, China

14:25-14:40  CNT3347  Short-term Forecast of Ionospheric TEC Based on CSA-LSTM  
Mr. Tong Zhu, Beijing Information Science & Technology University, China

14:40-14:55  CNT3368  Nature-inspired Optimization: Optimizing Distance of Emergency Response Wagons en Route To Railway Crossing Accident Location  
Mr. Israel Edem Agbehadji, Faculty of Accounting and Informatics, Durban University of Technology, South Africa

14:55-15:10  CNT3366  Evolving Network Representation Learning Based on Recurrent Neural Network  
Dr. Mingshuo Nie, Software College, Northeastern University, China

15:10-15:25  CNT3367  Bipartite Evolving Network Representation Learning Based on Reconstruction Network  
Prof. Dongming Chen, Software College, Northeastern University, China

15:25-15:40  CNT3320  Collaborative Filtering is a Lie or Not? It Depends on the Shape of Your Data Domain  
Mr. Hao Wang, Ratidar Technologies Co. Ltd, China

15:40-15:55  CNT3192  Disruption Resilient Data Delivery Mechanism for Communication in Smart Grids  
Dr. Boyang Zhou, Intelligent Network Research Institute, Zhejiang Lab, China

15:55-16:10  Coffee Break
<table>
<thead>
<tr>
<th>Time</th>
<th>CNT</th>
<th>Title</th>
<th>Speaker, Institution</th>
</tr>
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<tbody>
<tr>
<td>16:10-16:25</td>
<td>CNT3370</td>
<td>Low Overhead Adaptive Channel Equalizations for Upstream Burst Reception in 200Gbps Intensity Modulation-Coherent PONs</td>
<td>Mr. Yuanzhe Sun, State Key Laboratory of Information Photonics and Optical Communications, Beijing University of Posts and Telecommunications, China</td>
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<tr>
<td>16:25-16:50</td>
<td>CNT3385 (Invited)</td>
<td>Future Indoor Wireless Network: 802.11bn (Wi-Fi 8) and Its Evolution</td>
<td>Prof. Gang Xie, Beijing University of Posts and Telecommunications, China</td>
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<tr>
<td>16:50-17:15</td>
<td>CNT3303 (Invited)</td>
<td>Method and Algorithms for Improving Positioning Accuracy for Users with Restricted Signal Bandwidth in 5G NR</td>
<td>Prof. Alexander Maltsev, Nizhny Novgorod State University, Nizhny Novgorod, Russia</td>
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<tr>
<td>17:15-17:30</td>
<td>CNT3396</td>
<td>On the Correspondence Principle for the Klein-Gordon and Dirac Equations</td>
<td>Mr. Kevin Giovanni Hernández Beltrán, Universidad Dr. Andrés Bello, El Salvador</td>
</tr>
</tbody>
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   • About 4 KM
   • Approx. 8 minutes by taxi
   • Approx. 20 – 30 minutes by bus No. MT1

2. Border Gate Terminal (澳门关闸) (注：大陆方向为拱北口岸) — Regency Art Hotel Macao
   • About 10 KM
   • Approx. 20 - 30 minutes by taxi
   • Approx. 45 - 60 minutes by bus No. 25B or No. 25.

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   • About 16 KM
   • Approx. 30 - 35 minutes by taxi
   • Approx. 40 - 50 minutes. Take bus No.102X, get off at Chun Lai Garden (泉澧花园), walk about 380m to Regency Art Hotel Macao.

4. Cotai Frontier Post (路氹边检大楼) (莲花口岸) — Regency Art Hotel Macao
   • About 4 KM
   • Approx. 8 - 15 minutes by taxi
   • Approx. 40 - 45 minutes by bus No.25, No.25B or No.26A

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Part VI Acknowledgements

On behalf of the CECNet 2023 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. We would also like to express our acknowledgements to the Technical Program Committee members who have given their professional guidance and valuable advice as reviewers. For those who contribute to the success of the conference organization without listing the name below, we would love to say thanks as well.

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