

BTSym'24

Brazilian Technology Symposium

Conference Program

October 28th, 29th, and 30th - 2024

Universidad Nacional del Altiplano, Puno - Perú

Organization



Welcome to the BTSym'2024 as a Virtual Event

The Brazilian Technology Symposium (BTSym), **ISSN 2447-8326**, is an event created by the Laboratory of Visual Communications of the Faculty of Electrical and Computer Engineering at the State University of Campinas. This is an excellent forum for presentations and discussions of the latest results of projects and development research in several areas of knowledge, in scientific and technological scope.

This event seeks to bring together researchers, students, and professionals from the industrial and academic sectors, seeking to create and/or strengthen the linkages between issues of joint interest. Participants are invited to submit research papers, case studies, articles of opinion, or posters, showing studies, methodologies, and results achieved in scientific level research projects, completion of course work for graduation, dissertations, and theses.

The BTSym'24 organizing committee invites researchers to attend and submit papers addressing the current research topics of interest. In 2024, the event will be held on **October 28th, 29th, and 30th at the Universidad Nacional del Altiplano – Puno, Perú**. Proceedings of the event will be published by **Springer** publisher through the book **Proceedings of the 10th Brazilian Technology Symposium - Emerging Trends and Challenges in Technology**, and will be submitted for indexing by **Scopus, WoS, and EI Compindex database**.

In 2024, we received **70 research works, divided into: 50 articles submitted for option A and 20 articles submitted for option B**.



Dr. Yuzo Iano
General Chairman

Organizing Committee



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FT/UNICAMP

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LCV/DECOM/FEEC/UNICAMP

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LCV/DECOM/FEEC/UNICAMP

Institutional Relationship Chair



Gabriel Cauma Vaz
LCV/DECOM/FEEC/UNICAMP

Institutional Relationship Chair



General information

Conference location:

Virtual via Zoom

Contact Info:

Phone LCV committee:

- Alex Rodriguez: +55 19 999984833



Useful Telephone Numbers:

Police: 105

Fire Brigade: 116

These numbers may be dialed from public or mobile phones, even without a card.

Contact BTSym Support:

If you have any need for additional information, questions, concerns, and/or system issues, please feel free to contact the Editorial Office via email.

Email Address:

contact.btsym@gmail.com

Virtual Oral and Poster Presentations:

The authors are obliged to be present during the panels designated for the presentation, using the time given by the person in charge of the panel discussion or poster session. Such presentations utilize technological solutions to allow you present live.

Official Opening – Virtual Event

| October 28th, 2024 (9:00 - 10:00) | |
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| 9:00 - 10:00 | Official Opening - Representante del BTSym'24 - Brasil - Representante de la UNA - Puno - Perú |
| | Opening Speaker Moderator: Msc. Alex Midwar Rodriguez Ruelas |

Plenary Talks - PANEL 1

October 28th, 2024 (10:30 – 11:42)

Panel discussion 1: Technology and industrial processes.

Panel discussion 2: Microelectronics, Sensors, Robotics, Artificial Intelligence, and Real-Time Systems.

Panel discussion 5: Telecommunications, product development and innovation in mobile systems.

Moderators:

Msc. Jean Pierre B. López Vargas

PhD. Juan Carlos Colque Ccarita

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|---------------|---|
| 10:30 - 10:42 | <p>001 - Paper: Didactic learning with Arduino Technology Through Robotics in Higher Level Students Authors: Milagros del Carmen Castañeda Barbaran, and Consuelo Ivonne Del Castillo Castro</p> |
| 10:42 - 10:54 | <p>003 - Paper: Evaluation of Transmission Parameters of a LoRaWAN Network in the Presence of Electromagnetic Interference in the 900 MHz Band Authors: Gabriel Antonio Cruz Yupanqui, and Jorge Luis Arizaca Cusicuna</p> |
| 10:54 - 11:06 | <p>006 - Paper: Evaluation of Colorimetry in Cheeses Using Machine Vision and Opencv: A Non-destructive Approach To Food Quality Control Authors: Russel Allidren Lozada Vilca, Omar Castillo Alarcón, Olivia Magaly Luque Vilca, Wilson Jose Pampa Vilca, and Maximo Amancio Montalvo Atco</p> |
| 11:06 - 11:18 | <p>036 - Paper: Enhancing Cansat Mission Safety: An Autogyro-based Landing Solution Authors: Lalo Villacorta, Fabrizio Chunga, Giovanni Aquino, and Cesar D. Salvador</p> |
| 11:18 - 11:30 | <p>058 - Paper: Optimizing Lettuce Crop Irrigation: A Microcontroller-based Automatic Drip System Using Soil Moisture Sensing Authors: Bertha Angélica Cañazaca Limachi, Ester Carolina Mendoza Yeresi, Gabino Rey Vidangos Ponce, Marco Antonio Quispe Barra, and Susan Machaca Condori</p> |
| 11:30 - 11:42 | <p>065 - Paper: Design of Triple-play Broadband Service in FTTH Networks Based on GPON for High Andean Tourist Area of Taraco – Puno - Perú Authors: Yony Mamani Quispe, Alexander Cherino Herpanocca, Guido Humberto Cayo Cabrera, Teobaldo Raul Basurco Chambilla, and Gavino José Flores Chipana</p> |

Plenary Talks - PANEL 3

October 29th, 2024 (13:00 – 14:00)

Panel discussion 3: Technology applied to buildings.

Panel discussion 6: Technologies applied to urban infrastructure.

Moderators:

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| 13:00 - 13:12 | <p>012 - Paper: Praxeological Analysis in Putucos Construction of The Peruvian Highlands Authors: Karina Reynoso Machaca, and Yasmani Vitulas Quille</p> |
| 13:12 - 13:24 | <p>014 - Paper: Productivity Evaluation With Six Sigma in The Construction of Traditional Putucos Type Houses Authors: Yasmani Vitulas Quille, and Felix Rojas Chahuares</p> |
| 13:24 - 13:36 | <p>016 - Paper: Procedure to Improve Reliability in the Selection of Materials Suppliers for Sanitary Facilities in Multifamily Buildings Using the Choosing by Advantages Methodology Authors: Fiorella Chate, and Karem Asthrid Ulloa Román</p> |
| 13:36 - 13:48 | <p>023 - Paper: Incidence of Solar Irradiation on Thermal Comfort for the Architectural Design of a Passive Heating System in Urban Housing in a Cold-dry Climate Authors: Keysi Zenaida Huanca Choquehuanca, and Grover Marín Mamani</p> |
| 13:48 - 14:00 | <p>024 - Paper: Urban Economic Revitalization by Overcoming Inclusive Accessibility Barriers in The Historic Center of Chucuito, Puno Authors: Paola Karol Chayña Guerra, and Grover Marín Mamani</p> |
| 14:00 - 14:12 | <p>037 - Paper: Evaluation of Coconut Shell Ash in Concrete Design Using Physical and Mechanical Tests Authors: Alvaro Huachhuaco Mora, Nallely Rayda Yanac Quispe, and Karla Lisette Lopez Pasapera</p> |
| 14:12 – 14:24 | <p>044 - Paper: Evaluation of Additions During Planning to Prevent Cost Overruns And Delays In Multifamily Housing Projects For Small Businesses Using A Probability Matrix Authors: Marcia Yamile Bautista Cabrera, Mirtha Stteffany Zuluaga Isuiza, and Giuliana Barraza Eléspuru</p> |

Plenary Talks - PANEL 6

October 30th, 2024 (12:42 – 14:06)

Panel discussion 7: Applied Biomedicines.

Topic covered: Medicine, Covid-19, Dentistry, Biology, Biomedicine, Nursing, Medicines, Vaccines.

Moderators:

Dr. Sheyla Lenna Cervantes Alagón

Dr. Vicky Cristina Gonzales Alcos.

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| 12:42 – 12:54 | <p>004 - Paper: Effect of Mouthwashes on Actinomices Viscosus ATCC 15987 And Streptococcus Mutans ATCC 10556. In Vitro Study Authors: Naysha Sharon Villanueva Alvaro, Esmeralda Quispe Clavijo, Paula Cactacora Padilla, Tania Carola Padilla Cáceres, and Vilma Mamani Cori</p> |
| 12:54 – 13:06 | <p>025 - Paper: Effect of Bulk Fill Resin Shade on the Depth of Cure, Activated with Different Intensities and Curing Times. In Vitro Study Authors: Anghyela Ananhy Chaiña Lope, Nelly Beatriz Quispe Maquera, and Betsy Quispe Quispe</p> |
| 13:06 – 13:18 | <p>026 - Paper: Effectiveness of the Number of Applications of Ozonized Propylene Glycol in Root Canal Disinfection Authors: Betsy Quispe Quispe, Nelly Beatriz Quispe Maquera, and Hernan Freddy Ortega Cruz</p> |
| 13:18 – 13:30 | <p>031 - Paper: Change in Salivary PH after Application of Dental Fluo Ride: Pilot Study” Authors: Sidgar Orlando Yucra Sardó, Vilma Mamani Cori, Yury Axel Yucra Sardón, and Talia Paola Calcina Asillo</p> |
| 13:30 – 13:42 | <p>034 - Paper: Characterization of Native Mercury Resistant Bacteria Isolated in Tailings from the Rinconada Mine and its Relevance in Public Health Authors: Vicky Cristina Gonzales Alcos, Ciria Ivonne Trigos Rondón, Sheyla Lenna Cervantes Alagón, Lucrecia Nina Carita, and Juan Pablo Huarachi Valencia</p> |
| 13:42 – 13:54 | <p>040 - Paper: Relationship between Facial Biotype and Transverse Diam Eters of The Jaws In Patients Diagnosed with Malocclusion Authors: Karen Paola Pineda Palomino, and Gian Carlo Valdez Velazco</p> |
| 13:54 – 14:06 | <p>043 - Paper: In Vitro Evaluation of the Inhibitory Effect of Probiotics Lactobacillus Plantarum on Pathogenic Bacteria Formed by Dental Biofilm in the High Plateau of Peru” Authors: Sheyla Lenna Cervantes Alagón, Vicky Cristina Gonzales Alcos, Juan Pablo Huarachi Valencia, Doris Charaja Jallo, and Laura Fernanda Gallegos Cervantes</p> |

Official Closing – Event Virtual

October 30th, 2024 (14:20 – 15:00)

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| 14:20 - 15:30 | Official Closing Moderator: Msc Alex Midwar Rodriguez Ruelas |
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**Thank you very
much!**

