

2017 Chilean Conference on Electrical, Electronics Engineering, Information and Communication Technologies (CHILECON 2017)

**Pucon, Chile
18 - 20 October 2017**

Pages 1-620



**IEEE Catalog Number: CFP17CHK-POD
ISBN: 978-1-5386-3124-9**

**Copyright © 2017 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:	CFP17CHK-POD
ISBN (Print-On-Demand):	978-1-5386-3124-9
ISBN (Online):	978-1-5386-3123-2

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

**2017 IEEE CHILEAN CONFERENCE ON ELECTRICAL, ELECTRONICS
ENGINEERING, INFORMATION AND COMMUNICATIONS TECHNOLOGIES
IEEE CHILECON2017**

Track 1 (Biomedical Engineering)

Paper #	Authors	Title	Pages
7	Marcos Sacasqui Huaito, Ismael Sanchez Rodriguez-Morcillo and Edilberto Vasquez Diaz	Adaptive Predictive Control of Dissolved Oxygen Concentration in a Dynamic Model of Whiteleg Shrimp Culture	1-6
19	Hector Kaschel and Cristian Ahumada	Design of a Triband Antenna Microstrip for 2.4 GHz, 3.5 GHz and 5.7 GHz applied a WBAN	7-13
24	Jhon Hernandez Martin, German Antonio Mendieta Mendieta and Luis Alberto Parra Piñeros	Analysis and Design of Transtibial Prosthesis*	14-18
75	Pablo Parra, Jomayra Jiménez, Nino Vega and Kleber Nuñez	Prototype of Exoskeleton Used in Child Rehabilitation with one Degree of Freedom.	19-24
85	Cesar Chavez, Jose Otero Otero and Nadira Gonzalez	Environmental Parameters Meter for Neonatal Intensive Care Units with Android Application for Mobile Devices	Not ready to IEEE XPLORE
89	João Paulo Virgilio Marinho Martins, Lourdes Mattos Brasil and Janice Magalhães Lamas	Unsupervised Feature Learning for Classification of Regions of Interest in Mammograms.	Not exposed in CHILECON
93	Franklin Placencia, Santiago Manzano, Juan Pallo, Marco Jurado and Dennis Chicaiza	Embedded Device For Blood Pressure Monitoring	25-29
96	Elkyn E. Hernández Sanabria, José A. Amaya Palacio, Hugo D. Hernández Herrera and Wilhelmus Van Noije	A Design Methodology for an Integrated CMOS Instrumentation Amplifier for Biospectroscopy Applications	30-36
103	Jack Fernando Bravo-Torres, Jorge Osmani Ordoñez-Ordoñez, Pablo Leonidas Gallegos-Segovia, Paúl Esteban Vintimilla-Tapia, Martín López-Nores and Yolanda Blanco-Fernández	A Context-Aware Platform for Comprehensive Care of Elderly People: Proposed Architecture	37-42
123	Guillermo Avendaño, Miguel Bustamante, Antonio Rienzo and Gaston Lefranc	Biomedical Engineering Projects to Support The Elderly	43-48
135	Andres Arcentales, Melissa Raza and Beatriz Giraldo	Characterization of HRV and QRS Slope During Audiovisual Stimulation	49-52
138	Huber Nieto-Chaupis, Hernan Matta, Brigitte Becerra, Rosa Perez, Richard Anton, Tula Espinoza and Violeta Nolberto	Proposal of a Telecare System for Monitoring Glucose Anomalous Behavior in Type-2 Diabetes Patients	53-56
172	Jose Cardenas and Hector Kaschel	Fetal ECG Multi-level Analysis using Daubechies Wavelet Transform for Non-invasive Maternal Abdominal ECG recordings	57-62
185	Yadini Pérez López, C. F. F Costa Filho, L. M. R. Aguilera and M. G. F. Costa	Automatic classification of light field smear microscopy patches using Convolutional Neural Networks for identifying Mycobacterium Tuberculosis.	63-67
251	Huber Nieto-Chaupis	Monte Carlo Simulation for the Very Anticipated Detection of Charged Giants Proteins in Type-2 Diabetes Patients based on the Internet of Bio-Nano Things	68-71
272	Romina Torres, Mauricio Poblete and Rodrigo Salas	Classifying human actions in daily life using computational intelligence techniques	72-76

Track 2 (Computer Networks)

Paper #	Authors	Title	Pages
13	Jan Camilo Quequezana Buendia and Julio Santisteban Pablo	AL-DDoS Attack Detection Optimized with Genetic Algorithms	Not exposed in CHILECON
91	Yasmany Prieto, Nicolás Boettcher, Sergio K. Sobarzo and Jorge E. Pezoa	Increasing Network Reliability to Correlated Failures Through Optimal Multiculture Design	77-82
92	Hector Kaschel and Karel Toledo	Energy Efficient Spectrum Management in Cognitive Radio Sensor Networks	83-90
116	Julio Flores, Vinicio Ramos, Raúl Lozada and Tony Flores	Analysis of solutions of Network Access Control to improve in and out securities on Corporative Networks	91-95
238	Tiago Araújo, Fernando Matos and Josilene Moreira	Intrusion Detection Systems' Performance for Distributed Denial-of-Service Attack	96-101
246	Pablo Leonidas Gallegos-Segovia, Jack Fernando Bravo-Torres, Víctor Manuel Larios-Rosillo, Paúl Esteban Vintimilla-Tapia, Iván Fernando Yuquilima-Albarado and Santiago J. Arévalo-Cordero	Living Lab concept for cloud analysis in networks of metropolitan sensors applying the concept of SD-WAN and hybrid networks	102-107

Track 3 (Production and Industry)

Paper #	Authors	Title	Pages
216	Victor Olivares, Felisa Cordova and Claudia Duran	Transport Logistics and Simulation Model for fleet of drones in a Mass Customization System	108-113
219	José Mardones, Andrés Iroume and Rodrigo Salazar	Data Register and Variable Monitoring System from Water Stream in Forest and Plantation Basins.	114-119

Track 4 (Software, Informatics and Computer Science)

Paper #	Authors	Title	Pages
4	Juan-Sebastian Gonzalez-Sanabria, Juan Antonio Morente Molinera and Alexander Castro Romero	DeSoftIn: A methodological proposal for individual software development	Not exposed in CHILECON
10	Manuel Navarro, Diego Benitez and Alberto Sanchez	A Least Square Procedure for the Solution of Pocklington's Equation	120-124
64	Sergio Rosim, João Ricardo de Freitas Oliveira, Alexandre Copertino Jardim, Monica De Martino and Alfonso Quarati	Open Data Practices: the Case of South America Drainage Datasets	125-130
119	Oscar Ancan and Carlos Cares	Do Developers Care about Code Smells? A Replicated Study from Chile	131-137
136	Pedro Infante, Alex Quingatuña, Santiago Nogales, Blanca Hidalgo, Tony Fernando Flores Pulgar and Fidel Gilart	Development of Web System based Geographic Information System Technologies to mapping Electromagnetic Fields	Not exposed in CHILECON
147	Pablo Leonidas Gallegos-Segovia, Jack Fernando Bravo-Torres, Víctor Manuel Larios-Rosillo, Paúl Esteban Vintimilla-Tapia, Iván Fernando Yuquilima-Albarado and Juan Diego Jara-Saltos	Social engineering as an attack vector for ransomware	138-143
181	Adrian Mena, Joel Rivera, Diego Teran, Freddy Tapia, Walter Fuertes, Hernan Aules and Theofilos Toulkeridis	Interactive Geo-location Based Service Application as Pervasive Computing through Mobile Devices	144-149
184	Sandra Kawamoto and Jorge Almeida	Scrum-DR: An Extension of the Scrum Framework Adherent to the Capability Maturity Model Using Design Rationale Techniques	150-156
211	Rosa Medina Durán, Enrico Malaguti and Cristian Duran-Faundez	Techniques for finding a list of solutions with increasing costs for the Semi-Assignment Problem	157-161
221	William Ipanaqué, Iván Belupú, José Castillo and Julio Salazar	Internet of Things applied to monitoring fermentation process of cocoa at the Piura's mountain range	162-166
273	Romina Torres, Marcelo Aros and Juan Felipe Calderón	Towards self-adaptation for cyber-physical systems using a distributed MAPE-K schema over XMPP	167-171

Track 5 (Energy and Power Systems)

Paper #	Authors	Title	Pages
16	Yosvany Esponda Fernández, Judiel Reyes Aguilar and Vitalio Vitalio Alfonso Reguera	Optimization from energy software in wireless sensor networks	Not exposed in CHILECON
17	Ricardo David Medina, Diego Xavier Morales, Marco Antonio Toledo and Javier Bernardo Cabrera	Power Transformer Risk Index Assessment for an Asset Management Plan	172-178
20	Arley Salazar Hincapie, Juan Fernando Alvarez Pineda, Andrés Felipe Romero Maya, Sebastian Marín Muñoz and Carlos Alberto Valencia Hernandez	Analysis of the thermoeconomical behavior on an split type air conditioner due to condenser fouling	179-185
26	Aramis Perez, Vanessa Quintero, Heraldo Rozas, Diego Jimenez, Francisco Jaramillo and Marcos Orchard	Lithium-Ion Battery Pack Arrays for Lifespan Enhancement	186-192
35	Ricardo David Medina, Diego Xavier Morales, Andrés Arturo Romero and Javier Bernardo Cabrera	Assessing Power Transformer Final Failure Consequences Using Fuzzy Logic	193-195
81	Juan Lata Garcia, Christopher Reyes Lopez, Francisco Jurado, Luis Fernández Ramírez and Higinio Sanchez	Sizing optimization of a small hydro/photovoltaic hybrid system for electricity generation in Santay Island, Ecuador by two methods	196-201
88	Guner Tatar, Kenan Toker, Necibe Fusun Oyman Serteller and Hayriye Korkmaz	A Dynamic Analysis of BLDC Motor by Using Matlab/Simulink and Mathematica	202-206
94	Pablo Troncoso, Ricardo Julian Mantz and Pedro Battaiotto	Active and Reactive Power Regulation in wind turbines based on BDFIG Machines.	Not exposed in CHILECON
97	Necibe Fusun Oyman Serteller and Dursun Ustundag	Analysis of Dynamic Behavior of Direct Current Motor with Electrical Braking Techniques	207-213
99	Matias Garbarino, Rodrigo Morales, Saul Cuevas, Pablo Henríquez, Jaime Rohten, Ernesto Rubio, Eugenio Wernekinck and Pedro Melin	Comparison between Maximum Power Point Tracking Algorithms for dc/dc Power Converters	214-219
101	Iovani Teave Rivera and Jorge Mendoza Baeza	Number and Location of Meters to Improve State Estimation in Distribution Networks	220-225
108	Nicolás Solís-Llanos, Ignacio A. Calle and Víctor H. Hinojosa	New approach applied to the generation expansion planning considering an AC modeling	226-232
109	Cristian Vera and Jorge Mendoza	Optimization of Centralized Charging Strategy for Electric Vehicles in Power Distribution Network	233-239
112	Diego Coronel, Enrique Buzarquis and Gerardo Blanco	Analyzing Feasibility of Energy Storage System for Energy Arbitrage	240-245
113	Almendra Awerkin, Humberto Verdejo, Cristhian Becker and Karina Barbosa	Statistical parametric techniques for power residential demand forecasting	246-252
124	Victorio Oxilia, Eduardo Ortigoza, Richard Ríos, Roberto Fariña and Gerardo Blanco	Harnessing Natural Resources with Shared Sovereignty for Power Generation in the Parana River Basin: Systematization of Learned Lessons	253-259
126	Jose Vitalino Ojeda Ortiz, Oscar Daniel Santa Cruz Cáceres, Mario Salomón Arevalo González, Daniel Alberto Ríos Festner and Gerardo Alejandro Blanco Bogado	ANALYSIS OF SUPPLY COSTS IN BUSES OF THE NATIONAL INTERCONNECTED SYSTEM OF PARAGUAY	260-265
128	Daniel Icaza, Pablo Flores, Hector Conce and Flavio Conce	Dimensioning of the main mechanical elements and final assembly of the DIAWIND-A2 wind turbine	266-271
131	John W. Castro, Efraín R. Fonseca C. and Pablo Meléndez M.	Energy Management Software Systems Based on ISO 50001 Standard: A Preliminary Systematic Mapping Study	272-278
142	Alvaro Mullo, Vique Javier, Mario Jiménez, Marco Pilatasig and Hernan Iturralde	Analysis of the incidence of grounding with high resistivity against atmospheric discharges in the sub - transmission line of 69KV San Rafael - Mulalo.	279-284
161	Cristian Enriquez, Diego Chacón, Hector Romero and Flavio Quizhpi	Simulation of Harmonics Produced by Electroliners in the Electrical Network of Cuenca City	285-290
167	Diego Paul Chacon Troya, Henry Muñoz and Claudio Patiño	Incorporation Analysis of Electric Water Heaters in the Electric Distribution Network of Cuenca City	Not exposed in CHILECON
178	Marcelo Cortes-Carmona, Abdiel Mallco-Carpio, Williams Calderón-Muñoz, Rodrigo Palma-Behnke and Jorge Reyes-Marambio	Altitude Effect in the Design of a Lithium-Ion Battery Packing System	291-297

Track 5 (Energy and Power Systems – continuation)

Paper #	Authors	Title	Pages
179	Marcelo Cortes-Carmona, Pablo Medina and Jessica Guevara-Cedeño	Optimal Programming of Insulator Washing in Transmission Lines and Substations	298-304
203	Diego Jiménez, María Vives, Guillermo Jiménez and Patricio Mendoza	Development of a Methodology for Planning and Design of Microgrids for Rural Electrification	305-310
209	Daniel Gonzalez and Hector Chavez	Towards Optimal Wind Power Plant Connecting Line Dimmensioning	311-314
213	Esteban Riquelme and Hector Chavez	Towards System-wise Synthetic Inertia Models to study power system frequency response	315-319
236	Ricardo Enrique Pérez Guzmán, Yamisleydi Salgueiro Sicilia and Marco Rivera	Communications in Smart Grids	320-326
239	Nicolás Mira-Gebauer, Erick Rojo-Olea and Patricio Mendoza-Araya	Induction machine small-signal impedance for stability studies using dynamic phasor modeling	327-332
243	Yamisleydi Salgueiro Sicilia, Marco Rivera and Cesar Astudillo	Support Vector Machines for Classification of Electrical Resistance Values within a VSI	333-337
267	Cristiane Brasil and Charles Melo	A Comparative Study Of Lead-Acid Batteries And Lithium Iron Phosphate Batteries Used In Micro-Gridsystems	Not exposed in CHILECON
277	Pablo Sanchez and Nelson Aros	Modeling of the Electrical Impact of the Tower Flexion in a Wind Turbine	338-344

Track 6 (Other topics)

Paper #	Authors	Title	Pages
18	Dario Fernando Cortes Tobar	Electronic System For Protection Of People Victims Of Domestic Violence In Areas Of Interior And Exterior	Not exposed in CHILECON
22	David Aguirre Salcedo and Pablo Raúl Yanyachi	Design of a Parabolic Patch Antenna in band L, with Double Layer and Air Substrate, to Weather Satellite Reception	Not exposed in CHILECON
84	Cristian Fiallos, Raul Haro, Freddy Acosta and Diego Benitez	On the Design, Simulation and Fabrication of Multiple Section Coupled-Line Directional Couplers at C-band using Microstrip Technology	345-349
118	Nicolas Ramos, Alfredo Rates, Nicolas M. Ortega, Felipe E. Besser and Ernest A. Michael	Coupling Control of a Telescope Focus into a Single-Mode Optical Fiber Based on a Reference Model Controller	350-354
132	Katherine Cortes, Rodrigo Reeves, Pekka Kangaslahti, Miguel Figueroa, Wagner Ramírez, Lilian Mora, Pablo Cartes, David Arroyo, Brian Molina, Gonzalo Burgos and Arti Rani	Development of at water vapor radiometer at 183 GHz for sites of extreme dryness	Not exposed in CHILECON
141	Alan Sanchez, Roberto Tapia and Esteban Vera	Comparative Analysis of Optical Image Compression Systems	Not exposed in CHILECON
153	Franklin Placencia, Santiago Manzano, Juan Pallo, Marco Jurado and Dennis Chicaiza	Electronic Clothes for Vital Signs Monitorig	355-359
168	Alejandro Navarro, Raul Burgos and Carlos Muñoz	Forest fire monitoring system, with visible spectrum cameras, in Torres del Paine National Park; Chilean Patagonia.	360-366
196	Jaime Pacheco and Roberto Moncada	Calculation of losses and energy efficiency of Synchronous Reluctance machines according to IEC Standard 60034-2	367-372
207	Edwin Pruna, Ivón Escobar, Marco Pilatásig, Mauricio Navarrete, Andrés Cárdenas and Jose Bucheli	Virtual system for lower limbs strengthening in children	373-377
208	Ivon Escobar, Accel Guamán, Javier Montaluisa, Edwin Pruna and Yolanda Marin	Mobile application for vowel learning in children with Down Syndrome "LVDS-App"	378-382
237	Javier Borquez, Moises Ferber and Karina A. Barbosa	Parametric Uncertainty Analysis of Inverse Linear Electric Circuit Problems	383-386
252	Gustavo Boza-Quispe, Juan Montalvan-Figueroa, Fabricio Puente-Mansilla and Jimmy Rosales-Huamaní	A Friendly Speech User Interface based on Google Cloud Platform to Access a Tourism Semantic Website	387-390

Track 7 (Information Technologies and Communication Systems)

Paper #	Authors	Title	Pages
14	Darwin Aguilar, Rita León, Darwin Palacios, Mario Campaña, Diana Moreno and Rocio Aguilar	Georeferenced application for location and rescue of people with disabilities in risk zones of Cotopaxi Volcano	391-396
27	Diego Paredes and Juan Granda	Communications system design, deploying FSO technology at Universidad de Las Américas Campuses	397-401
71	Sergio Mora, Yeni Alonso, Nelson Vargas, Jhon Vera and Jonathan Avendano	Design of a bandpass filter using Microstrip Hairpin resonators	402-406
79	David Zabala, Gabriel Campuzano and Cesar Azurdia	Mitigated ICI in DVB-C2-OFDM Systems Utilizing the Optimal Improved Double Jump 1 Filter	407-410
80	Alberto Marroquin, Adalberto Gomez and Alejandro Paz	Design and implementation of Explorer Mobile Robot controlled remotely using IoT Technology	411-417
98	Julio Manco and Martin Soto	Spread Spectrum Orthogonalization of Superimposed Training Signals in OFDM Systems	418-422
120	Rolando P. Reyes Ch., Manolo Paredes Calderón, Luis Montoya, Hugo Pérez Vaca and Wilbert G. Aguilar	MilNova: An Approach to the IoT Solution based on Model-Driven Engineering for the Military Health Monitoring	423-427
133	Lácides Ripoll, Luis Torres and Manuel Sierra	Monte Carlo-based Tolerance Study of an End-Fed Resonant Slot Waveguide Linear Array Antenna	428-433
134	Luis Torres and Dainer Vasquez	Acoustic Source Localizer Using Wireless Sensor Networks	434-439
145	Alberto Belalcazar, Vicente Merchan, Javier Díaz and Lia Molinari	Towards Complement Strategy in the Business-IT Alignment	440-445
149	Luis Camargo, Byron Medina and Jorge Gómez-Rojas	Sensors Network for Tourist Beaches	446-450
152	Washington Fernández and Krzysztof Herman	Union of code and Encryption for channels with Class A Noise	451-455
154	Andrés Salazar, Juan Pallo, Santiago Manzano, Carlos Nuñez, Marco Jurado, Julio Cuji and Franklin Placencia	Electronic System of Monitoring and Control for Distribution of Electricity in Households	456-462
157	Antônio Marcos Melo Medeiros, Murilo Lívio de Oliveira, João Victor Ramos de Castilho, Cleidimar Garcia Pereira, Marcos Antônio de Souza, Pinheiro Lima Pedro Henrique and Jose Artur Cardoso de Oliveira Junior	The Fifth Generation Of Mobile Communication And Its Applications On The Internet Of Things (IoT)	463-469
162	Mohammed Jasim, Jorge Pezoa and Nasir Ghani	Simultaneous Multi-Beam Analog Beamforming and Coded Grating Lobes for Initial Access in mmWave Systems	470-475
177	Maria Estela	A Barnes-Wall lattice general scheme for the K-user Symmetric Interference Channel	476-481
186	Patricia Möller-Acuña, Alejandro Valdés-Jimenéz, Roberto Ahumada-García and José Antonio Reyes-Suárez	An information system for preventive alerting of frost episodes in the Central Region of Chile	482-487
191	Roberto Ahumada-García, Patricia Möller-Acuña and José Antonio Reyes-Suárez	An expert system for handling Phytosanitary Products in Chilean export fruit	488-491
198	Nicolás Matías Ortega Silva and Claudio Valencia Cordero	Towards Physical Layer Security systems design using Game Theory approaches	492-497
199	Erwin J. Sacoto Cabrera, Pablo L. Gallegos Segovia, Gabriel A. Leon Paredes, Jorge L. Rodriguez Bustamante and Gabriela P. Arevalo Quizhpi	Internet of Things: Informatic System for Metering with Communications MQTT over GPRS for Smart Meters	498-503
200	Pablo Velasquez, Christian Correa, Diego Rivera and Lorenzo Vasquez	A low-cost IoT based Environmental Monitoring System. A citizen approach to pollution awareness	504-509
212	Cristian Duran-Faundez, Daniel G. Costa, David Rocha-Rocha, Francisco Vásquez-Salgado, Gilbert Habib and Patricio Galdames	On optimal deployment of industrial wireless sensor networks	510-515
223	Nicolás López and Claudio Valencia	Constant Jamming Experimental Results on Indoor Wireless Sensor Network	516-521
229	Samuel Montejo-Sánchez, Cesar Azurdia-Meza, Sandy Bolufé, Sandra Céspedes, Ismael Soto and Richard Demo Souza	Novel Channel Hopping Sequence Approaches to Rendezvous for VANETs	522-526

Track 7 (Information Technologies and Communication Systems – continuation)

Paper #	Authors	Title	Pages
233	Gonzalo Olmedo and Nancy Paredes	Analytical performance evaluation for M-QAM with cochannel interference in cellular networks over AWGN and Rayleigh fading channels	527-533
244	Vicente Marín, Ariel Leiva, Alejandra Beghelli, Francisco Pizarro, Ricardo Olivares and Cesar Garrido	A RMLSA Algorithm for Wide-Area Flex-Optical Networks	Not exposed in CHILECON
279	Daniel G. Costa, Cristian Duran-Faundez and Joao Carlos N. Bittencourt	Availability Issues for Relevant Area Coverage in Wireless Visual Sensor Networks	534-539

Track 8 (Automatic and Process Control)

Paper #	Authors	Title	Pages
32	Darwin Omar Alulema Flores, Víctor Proaño, Cristian Andino, Diego Rodríguez, Alexander Ibarra, Derlin Morocho and Freddy Tapia	Balance Control by Diffuse Logic for a Phoenix Hexapod Robot	Not exposed in CHILECON
41	José Leonardo Benavides Maldonado, Vilma Estefanía Salinas Nalvay, Hernán Fabricio Alvarado Romero, Gonzalo Ramiro Riofrio Cruz, José Francisco Ochoa Alfaro, Jimmy Stalin Paladines and José Fabricio Cuenca Granda	Control of a Prototype for the Classification of Copper	540-547
48	Arathy Rajeev V.K., Marco Rivera and Ganesh Kumar S.	Investigation on Passivity Based Control for Electrical Applications	548-453
74	Gilbert Habib, Ralph El Khoury, Nicolas Haddad, Cristian Duran-Faundez and Daniel G. Costa	An experimental platform for evaluating low power wireless communication systems for industrial applications	554-558
82	Erwin Werner, Christian Antileo and Nelson Aros	Model of active sludge process coupled to a layer based settler for simulation of a dissolved oxygen control scheme	557-562
87	Claudio Alarcon and Carlos Muñoz	Minimum Time Swing-Up Controller Applied to a Rotary Inverted Pendulum	565-570
104	Marco Alexander Carpio and David Pinos	Modeling, Linearization and design of a Space State controller of a Pneumatic Proportional Piston.	Not exposed in CHILECON
122	José Oviden, José Manrique and William Ipanaqué	Modelling, simulation and Nonlinear Control of an Evaporator for Bioethanol production	571-576
125	José Oviden, José Manrique and William Ipanaqué	Model and control of a refrigeration system for fruit preservation	577-583
127	Felipe Arriagada and Francisco Vargas	Optimal State Prediction in Feedback Systems with Data Loss Compensation Strategies	584-589
148	Edwin Pruna, Edison Sásig and Santiago Mullo	PI and PID controller tuning tool based on the Lambda method	590-595
150	Victor Niels Romero Alva, Witman Joel Alvarado Diaz and Avid Roman Gonzalez	A 3D Printer and Integrated Supply System	Not exposed in CHILECON
155	William Gutierrez, Carlos Heber Jiménez and Mario Fernandez	Web Access for Flexible Manufacturing System	596-601
165	Hugo Garces, Alejandro Rojas and Luis Arias	Identification and Control of Total Radiation in a Combustion Process Based on Hammerstein Systems	602-607
166	Ademar Goncalves Costa Junior, Jose Leonardo Benavides Maldonado, Fabricio Alvarado Romero, Jhon Calderon Sanmartín, Michael Valarezo and Hernán Castillo	N4SID Method Applied to Obtain a Discrete-Time Linear State Space System as a Mathematical Model of a Jaw Crusher Prototype	608-613
173	Jonathan M. Palma, Leonardo De P. Carvalho, Tábitha E. Rosa, Cecilia F. Morais and Ricardo C. L. F. Oliveira	H-2 filtering through multi-hop networks: trade-off analysis between the network consumption and performance degradation	614-620
176	Alexi Delgado and Hugo Flor	Selection of the best air purifier system to urban houses using AHP	621-624
189	Leonardo De P. Carvalho, Jonathan M. Palma, Alim P. De C. Gonçalves and Cristian Duran-Faundez	Applying Polytopic Uncertainty in the Vehicle-Following Problem with Lossy Networks	625-631
194	Gerald Torres, Karina A. Barbosa and Francisco Cubillos	Non-linear Control Design to Direct Rotary Dryer	632-637
197	Felipe Alarcón, Iván Velásquez, Renato Hunter, Boris Pavez and Roberto Moncada	Hybrid PID-Fuzzy pitch control for wind turbines	638-643

Track 8 (Automatic and Process Control – continuation)

Paper #	Authors	Title	Pages
205	Kristhian Ardura and Nelson Aros	Model Predictive Control on a Induction Machine for Electric Traction	644–648
206	Edwin Pruna, Santiago Mullo, Jhonathan Caicedo, Xavier Zambrano, Ivón Escobar, Andrés Gordón and Patricia Constante	Distributed System for the monitoring and control of Processes	649-653
214	Víctor Gutiérrez-Godoy, Luciano González-González, Christian Hernández-Novoa, Cristian Duran-Faundez, Ernesto Rubio, Alleiny Machado Sosa, Krzysztof Herman and Jonathan M. Palma	Wireless control of a coupled tanks system: A case study	654-658
230	Carlos Muñoz-Poblete and Mario Fernández-Fernández	Sliding Mode Controller applied to a Levitated Magnetic Suspension System. A didactic view	659-664
231	Sergio Castro, Byron Medina, Sergio Sepúlveda, Dinael Guevara and Luis Camargo	Methodology for Virtual Instruments development	665-670
234	Rodrigo Oróstica, Manuel A. Duarte-Mermoud, Cristian Jáuregui and Gastón Lefranc	Inverted Pendulum Stabilization by means of Fractional Order PID Controllers	671-677
241	Dany Siadén Paiva and Edilberto Vásquez Díaz	Comparative Analysis of adaptive PID and NEPSAC Controller Performance for Continuous Stirred Tank Heater	678-683
257	Mairon Marques, Murillo Magan, Ruberlei Gaino and Márcio Covacic	Control of Uncertain System Represented by Polytope Using Enhanced Lyapunov Function	684-689
263	Nelson Gatica, Carlos Muñoz and Patricio Sellado	Real fuzzy PID control of the UAV AR.Drone 2.0 for hovering under disturbances in known environments	690-695
274	William Ipanaqué and Irene Alvarado	Wiener Predictive Control for a pH neutralization plant	696-702
278	Matías Veras, Roman Osorio-Comparán, Manuel Duarte-Mermoud, Antonio Rienzo and Gaston Lefranc	Variables Control of a Modular Greenhouse	703-710

Track 9 (Engineering Education)

Paper #	Authors	Title	Pages
38	Nino Vega, Pablo Parra and Daniel Martillo	Didactic Equipment Developed with Embedded Systems for the Learning of Engineering.	711-716
72	Víctor Proaño and Marco Gualsaquí	Line Follower Simulator with Fuzzy Control	717-722
83	Flavio Torres, Juan Plana, Patricio Sellado and José Martínez	Intelligent Instrumentation of a Water Tank System for Education Purposes	723-727
100	Oscar Núñez-Mata, Pablo González-Inostroza, Patricio Mendoza-Araya and Guillermo Jiménez	Development of a Microgrid Protection Laboratory Experiment for the Study of Overcurrent and Under Voltage Functions	728-733
110	Malka Irina Cabellos Martínez	Energy Efficiency Diagnosis Of The Solar Photovoltaic Energy Test Bank At The Plazoleta A La Vida In The Francisco De Paula Santander Ocaña University	734-739
130	Marco Pilatasig, Jorge Buele, John Espinoza, Franklin Silva, Pablo Pilatásig, Alvaro Mullo and Edwin Pruna	Implementation of Fuzzy Controller in Low Cost Embedded Boards for a Flow System	740-746
146	Benito Bernardo León-Ullauri, Jack Fernando Bravo-Torres, Roque Daniel Contreras-Chacón, Jennifer Andrea Yépez-Alulema, Diego Andrés Cuji-Dután and Paúl Esteban Vintimilla-Tapia	Detection and recommendation of experts/authorities of Mendeley and Twitter topics for learning stimulation	747-753
248	Huber Nieto-Chaupis	Merging Nanocommunications Topics in the Electrical and Network Engineering Programs of Peruvian Universities	754-757
250	Huber Nieto-Chaupis, Hernan Matta-Sólis, Carlos Campomanes-Bravo, Rosa Perez-Siguas and Roberto Cumpen-Vidaurre	Mathematical Methodologies for the Measurement of the Quality of Education in Engineering Programs in Peru	758-763
271	Edwin Malagon and Alexis Rojas	Analysis and Simulation of Graphs Applied to Learning with Parallel Programming in HPC	764-770

Track 10 (Signal Processing)

Paper #	Authors	Title	Pages
11	Diego Benitez	A Simple Algorithm for Detection of QRS Onset in Single Channel ECG Signals	771-776
29	Betsabe Simbana, Darwin Omar Alulema Flores, Christian Vega and Derlin Morocho	Design of an Augmented Reality-based Application for Quito's Historic Center	Not exposed in CHILECON
30	Andres Pazmiño, Darwin Omar Alulema Flores, Derlin Morocho, Alexander Ibarra, Veronica Alulema and Jonathan Flores	Analysis of a Zigbee Mesh Network Based on the IEEE 802.15.4 Standard for the Operation of a Drone	Not exposed in CHILECON
31	Flavio Minos Pineda López, Paul Ayala, Katherine Cajas Narváez, Silvana Vargas Salinas, Roberto Pineda López and Derlin Morocho	Bilirubinosis Pattern Detection in Newborns Through Skin Pigmentation Analysis	Not exposed in CHILECON
33	David Mendoza, Darwin Omar Alulema Flores, Derlin Morocho, Alexander Ibarra, Veronica Flores and Jonathan Flores	Design of the Control Interface for a quadricopter with the Kinect device	Not exposed in CHILECON
34	David Arellano, Julio Jironza, Alexander Ibarra, Lenin Rómulo Abatta Jácome, Darwin Omar Alulema Flores and Derlin Morocho	Design and Construction of Stabilizing Mechanisms for a Drone Camera	Not exposed in CHILECON
36	Karla Espinel, Darwin Omar Alulema Flores, Derlin Morocho and Alexander Ibarra	Evaluation of the Performance and Benefits of a Ginga-NCL-Based Interactive Content Decoder on a Raspberry PI	Not exposed in CHILECON
86	Alejandra Fonseca, Darwin Alulema, Flavio Pineda and Derlin Morocho	Auxiliar Prototype for Physiotherapy Using Kinect	Not exposed in CHILECON
90	Marcus Lima, César Quiroz, Pedro Mello and Paulo Kurka	Neural Network Regularization of an Inertial Odometry Estimation for Position Control of a Mobile Robot	777-782
106	Gabriel Fernandes, Luiz De Almeida, Paulo Santos, Sander Brito, Alípio Motta and Omar Vilcanqui	Channel Model with Capacity Estimation Algorithm on Primary Distribution Overhead Lines for Broadband PLC	783-788
107	Patricio López, Roberto Triviño, David Calderón, Andrés Arcentales and Ana Guamán	Electronic nose prototype for explosive detection	789-792
111	Caio Henrique Tavares and Taufik Abrão	Bayesian Estimators for Cooperative Spectrum Sensing in Cognitive Radio Networks	Not exposed in CHILECON
115	Josué Hernández, Noraiba Juárez and Abraham Medina	An introduction to the study of the acoustic wave propagation in a homogeneous dispersive media	793-797
151	Roman Lara and Katherine Garcés	Validating a Channel Model Propagation in Outdoors Scenarios by Using Bootstrap Method	Not exposed in CHILECON
158	Wilber Joel Diaz-Sotelo, Avid Roman-Gonzalez, Natalia I. Vargas-Cuentas and Mirko Zimic	EEG Signals Processing applied to Yes-No Short answers using self-organizing maps	Not exposed in CHILECON
171	Lerko Araya-Hernández, Jorge F. Silva, Axel Osses and Felipe Tobar	A Bayesian Mixture-of-Gaussians Model for Astronomical Observations in Interferometry	798-802
175	Alejandro Cuevas, Alejandro Veragua, Sonia Español, Gustavo Chiang and Felipe Tobar	Unsupervised Blue Whale Call Detection Using Multiple Time-Frequency Features	803-808
182	Krzysztof Herman and Washington Fernández Ravanales	A comparative study of selected methods for ultrasonic signals energy estimation for target strength and distance evaluation	809-812
195	Guzman Vigliecca, Maximiliano Silva, Vittorio Scopelli, Nicolás Pérez and Pablo Monzón	Impact localization in solid surfaces using acoustic waves	813-817
210	Josué Hernández, Abél López, Armando Serrano and Abraham Medina	Measurement of the sound pressure level during the discharge process of a tilted silo	818-823
235	Fernando Antonio Castillo, Jose Cifuentes, Milton Marín, Luis Arias and Hugo Garcés	Study of Spectral Emission of burning Biomass in the VIS and NIR Spectral Band	824-829
242	Witman Alvarado Diaz, Brian Meneses Claudio and Avid Roman Gonzalez	Implementation of a Brain-machine Interface for Controlling a Wheelchair	830-835

Track 10 (Signal Processing – continuation)

Paper #	Authors	Title	Pages
245	Jean Carlos Fabiano Dos Santos and Jose Alexandre De França	Frontier solution and recovery of corrupted ultrasonic echoes on an anemometer, using zero-crossing technique	836-840
264	Brian Andreé Meneses Claudio, Witman Alvarado Diaz, Eduardo Manuel Zamora Villaorduña and Avid Roman González	IMPLEMENTATION OF A WIRELESS SYSTEM FOR THE PROCESSING AND COMPARISON OF CEREBRAL WAVES OF PATIENTS WITH AMIOTROPHIC LATERAL SCLEROSIS THROUGH MATLAB IDENTIFYING THEIR BASIC NEEDS	841-847

Track 11 (Robotics and Artificial Intelligence and Vision)

Paper #	Authors	Title	Pages
9	Danny Sotomayor, Milton Rosero, Diego Benitez and Paola Leon	A Real-Time Vehicle Identification System Implemented on an Embedded ARM Platform	848-854
15	Pablo Ramos and Erick Vallejo	Evolutionary learning algorithm for the navigation of mobile robots in unstructured or partially structured environments	Not exposed in CHILECON
21	Ricardo Alonso and Alcides Chavez	Short Term Load Forecast Method Using Artificial Neural Network With Artificial Immune Systems	Not exposed in CHILECON
25	Daniel Aguilera Castro, Manuel Neira Cárcamo, Cristhian Aguilera Carrasco and Luis Vera Quiroga	Stairs recognition using Stereo Vision-based algorithm in NAO robot	855-860
95	Sonia Martínez, Anahí Carvajal, David Loza, Alexander Ibarra and Luis Segura	Collaborative two-arm robotic torso for the development of an assembly process	861-866
137	Luis Delfin Rojas Puron, Ana Carolina Oliveira Lima, Joao Evangelista Neto, Luis M. Rojas Aguilera and Daniel Guzman Del Rio	Procedure neuro-fuzzy with application in inferential sensor	867-872
139	Claudio Morales and Pablo Adasme	Modeling a Simple Traveler Salesman Problem for Improving Energy Efficiency in Robots that Execute Computer Numerical Control Machining	873-877
156	Ademir Roberto Freddo, Robison Cris Brito, Francisco Reinaldo and Renato Hallal	Classification of Latin Musical Genres by k-NN	Not exposed in CHILECON
160	Roman Osorio-Comparán, Alonso Segura, Ismael López-Juárez, Gaston Lefranc and Mario Peña	Smart Semaphore Using Image Processing	878-884
192	Antonio Marcos Melo Medeiros, Jose Artur Cardoso De Oliveira Junior, Pedro Henrique Pinheiro Lima, Antonio Eliseu Holdefer, Jose Wilson Lima Nerys, Joao Victor Ramos De Castilho and Murilo Livio de Oliveira	Development Of A Remotely Operated Submarine Vehicle	885-891
215	Mario Peña, Roman Osorio, Gaston Lefranc, Víctor Lomas and Mauricio Ontiveros	Contour Descriptor Generation Algorithm Implemented in Embedded System	892-899
220	Paola Montufar, Hugo Salazar, Wilbert Aguilar, Luis Segura and David Loza	Kalman Filter Implementation in a Working Cell to Classify Parts that are in Motion	900-906
222	Alan Maldonado-Ramirez, Ismael Lopez-Juarez, Reyes Rios-Cabrera, Roman Osorio-Comparan, Mario Peña-Cabrera and Gaston Lefranc	A Fault Compensation Algorithm for a Distributed Manufacturing System	907-912
224	Jessica Fernanda Pereira Zamaia and Leonimer Flávio de Melo	Nonholonomic Mobile Robot Prototype for Standalone Navigation with Embedded System	913-919
227	Nelson Campos, Heron Monteiro, Alisson Brito, Antônio Mn Lima, Elmar Melcher and Marcos Morais	A Framework for Design and Validation of Face Detection Systems	920-926
232	Ricardo Fernando Nunes and Suely Cunha Amaro Mantovani	Inverse kinematics of robotic manipulators mapping using parallel configured RNAS applied to a 5 DOF manipulator controlled by Intel® Galileo Gen 2	Not exposed in CHILECON
247	Rodrigo Castro, Daniel Ochoa and Ronald Criollo	On the influence of spectral calibration in hyperspectral image classification of leaves	927-932
249	Boris L. Martinez-Jimenez, Yunier Valeriano-Medina and Ana E. Juvier-Ayala	Fuzzy Modeling and Control for an AUV Movement in Horizontal Plane	Not exposed in CHILECON

Track 11 (Robotics and Artificial Intelligence and Vision – continuation)

Paper #	Authors	Title	Pages
254	Wilbert G. Aguilar, Cecilio Angulo and Jorge A. Pardo	Motion Intention Optimization for Multirotor Robust Video Stabilization	933-936
255	Jorge A. Pardo, Wilbert G. Aguilar and Theofilos Toukeridis	Wireless communication system for the transmission of thermal images from a UAV	937-941
258	David Orbea, Jessica Moposita, Wilbert G. Aguilar, Manolo Paredes, Rolando P. Reyes Ch. and Luis Montoya	Vertical take-off and landing with fixed rotor	942-947
259	Elizabeth Olson, Nathalie Risso, Adam Johnson and Jonathan Sprinkle	Fuzzy Control of an Autonomous Car using a Smart Phone Camera	948-953
266	David S. Sandoval, Wilbert G. Aguilar and Leandro Alvarez	Analysis of a Laser Range Finder for Odometry on Indoor Mobile Robots	Not exposed in CHILECON
269	David Ortega-Aranda, Ismael Lopez-Juarez, Baiyda Nath-Saha, Roman Osorio-Comparan, Mario Peña-Cabrera and Gaston Lefranc	Towards Learning Contact States during Peg-in-hole Assembly with a Dual-Arm Robot	954-959
270	Jovanny Bedoya Guapacha and Suely Cunha Amaro Mantovani	Real time object detection and tracking using the Kalman Filter embedded in single board in a robot	960-965
275	Ernesto Paiva-Peredo, Juan Carlos Soto, William Ipanaqué, Cesar Cherre, Oscar Yañez and Gustavo Silva	Design of the Position Control of a Quad-rotor using Optical Flow Sensor and LIDAR	966-970
276	William Gutiérrez and Marcela Jamett	Combined Approach using Artificial Vision and Neural Networks for Facial Recognition	971-975
290	Patricia Muñoz Bustos, Sonia Salvo Garrido, Millaray Curilem Saldias, Horacio Miranda Vargas and Mónica Bravo Sanzana	Selection of determinant attributes for the results of the SIMCE Matemática 2015 of 8° degree, Region de La Araucanía Chile, using Genetic Algorithms and Support Vector Machines	976-981

Track 12 (Power Electronics)

Paper #	Authors	Title	Pages
1	Marco Rivera, Zhengfei Di, Jiawei Zhang and Patrick Wheeler	Indirect Predictive Control Strategy with Mitigation of Input Filter Resonances for a Direct Matrix Converter	982-987
2	Marco Rivera, Handbing Dan, Luca Tarisciotti and Patrick Wheeler	Indirect Model Predictive Control Strategy with Active Damping Implementation for a Direct Matrix Converter Operating at Fixed Switching Frequency	988-993
77	Ponkumar. S, Famitha Kamroon. S, Marco Rivera and Ganesh Kumar S	REALIZATION OF CASCADED MULTILEVEL INVERTER	994-1000
102	Fernando Alvarez and Maria Fernanda Chaparro-Ronderos	Method for WSN node current measurement and energy consumption estimation	Not exposed in CHILECON
114	Elmer Osman Hanco Catata, Diodomiro Baldomero Luque Carcasi and José Luis Azcue Puma	Comparative Analysis of Two Torque Control Strategies for 6/4 Switched Reluctance Machine	1001-1006
170	Nelson Aros, Vanessa Mora and Claudio Alarcon	Model Predictive Control for Synchronous Reluctance Motor Drive	1007-1012
180	Javier Muñoz, Ignacio Torres, Johan Guzman, Pablo Silva and José Troncoso	Modulation Index Sweep for Selective Harmonic Elimination Technique for a 27-Level Asymmetric Multilevel Converter	1013-1018
190	Cristián Pesce G., Camilo Maury, Rubén Peña, Javier Riedemann and Ramón Blasco-Gimenez	An Improved DC-DC Modified Flyback Converter Topology with High Efficiency	1019-1025
218	Diego Soto-Sanchez, Marcelo Hernandez, Ivan Andrade and Ruben Peña	Control of an Asymmetric Alternate Arm Converter for HVDC	1026-1031
281	Javier Muñoz, Patricio Gaisse, Fausto Cadena, Carlos Baier, Rodrigo Aliaga and José Troncoso	Proportional Resonant Controller for a 27-Level Asymmetric Multilevel STATCOM	1033-1038
282	Sergio Toledo, Edgar Maqueda, Marco Rivera, Raúl Gregor, David Caballero, Federico Gavilán and Jorge Rodas	Experimental Assessment of IGBT and SiC-MOSFET based Technologies for Matrix Converter using Predictive Current Control	1039-1044
283	Sergio Toledo, Marco Rivera, Javier Muñoz, Rubén Peña and José Riveros	Predictive Torque and Flux Control with Reactive Power Minimization for a Multi-Drive Indirect Matrix Converter System operating at Fixed Switching Frequency	1045-1050

Track 12 (Power Electronics – continuation)

Paper #	Authors	Title	Pages
285	Marco Rivera, M. Amirbande, Aabolfazl Vahedi, Luca Tarisciotti and Patrick Wheeler	Fixed Frequency Model Predictive Control with Active Damping for an Indirect Matrix Converter	1051-1056
286	Marco Rivera, Usman Nasir, Luca Tarisciotti, Patrick Wheeler, Tomislav Dragicevic and Frede Blaabjerg	Predictive Control Strategies for an Indirect Matrix Converter Operating at Fixed Switching Frequency	1057-1062
287	Felipe Herrera, Marco Rivera and Jose Agustin Riveros Insfran	Implementation of Modulation and Control Techniques for Multilevel NPC Converters	1063-1069

Track 13 (Agrofoods)

Paper #	Authors	Title	Pages
6	Andres Aramburu Pardo Figueroa, Jose Jose Manrique Silupu and Rafael Saavedra Garcia Zabaleta	Adaptive PID controller with auto-tuning applied to the agricultural food industry	1070-1076
143	Raúl Carrasco, Ismael Soto, Fabian Seguel, Luis Osorio, Carolina Lagos and Cherie Flores	Water balance analysis in plantations of strawberries, in the commune of San Pedro	1077-1081
187	Yetzabel González, Roberto Ahumada-García, Patricia Möller-Acuña and José Antonio Reyes-Suárez	A system for online quality analysis for cherry harvest process inside the orchard	1082-1085
188	Patricia Möller-Acuña, Roberto Ahumada-García and José Antonio Reyes-Suárez	An information System for online Quality Control of Export Fruits	1086-1090
260	Juan Soto, Ernesto Paiva, William Ipanaque, Jorge Reyes, Daniel Espinoza and David Mendoza	Cocoa bean quality assessment by using hyperspectral index for determining the state of fermentation with a non-destructive analysis	1091-1095
262	Christian Correa, Lorenzo Vasquez, Alan Vera and Pablo Velasquez	Development of Robotic System for Humus Productions. A Strategy for recycling Awareness	1096-1099

Track 14 (NExT-Brasil (Invited session))

Paper #	Authors	Title	Pages
42	Daywes Pinheiro-Neto, Elder Geraldo Domingues, Aylton Jose Alves and Wesley Pacheco Calixto	Investment Risk Analysis for Small Hydro Power Plants in the Short Term Market in Brazil	1100-1106
43	C.A. Silva, Luciano Santos, Wesley P. Calixto, Jose Luiz F. Barbosa, Marcela De Oliveira and Danilo Silva	Simulation and minimization of waiting time in rows of elevators of public buildings	1107-1112
45	Leandro Kazuaki Tsuruda, Wesley P. Calixto, Aylton J. Alves, Luiza Vitor and Marcel B. S. Souza	Evaluations of Energy Efficiency and Economic Impact of the application of Retrofit Lighting in Popular Housing	1113-1118
46	Viviane M. Gomes, Julyana P. Saraiva, Beatriz S. Lima, Paulo H. R. Flores, Alfredo O. Assis, Flavio A. Gomes, Alana S. Magalhaes, Junio S. Bulhoes, Calebe Abrenhosa, Gabriel A. Wainer and Wesley P. Calixto	Analytical method for calculating the sensitivity index of system parameters	1119-1124
47	Cleber A. Ganzaroli, Douglas F. De Carvalho, Rafael N. H. M. Dias, Luiz A. Couto, Daywes Pinheiro-Neto and Wesley P. Calixto	Nonlinear Practical Model Based Predictive Control: Study Case with DC Motor	1125-1130
49	Alan Silva, Wesley P. Calixto, Alana S. Magalhães, Uyara F. Silva and Aylton J. Alves	Conformal Mapping Applied to Encoding and Decoding of Images	1131-1135
51	Alana S. Magalhães, Aylton Alves, Calebe Abrenhosa Matias, Wesley Pacheco Calixto, Viviane Margarida Gomes, Alan Silva, Junio S. Bulhões, Marcio Reis, Geovanne P. Furriel and Gabriel Wainer	Sensitivity Analysis of the Synchronous Generation Repowering System in parallel with Induction Generator	1136-1140
53	José Cararo, Alan Silva, Bruno Aniceto, Márcio Reis, Bruno Rodrigues, Natália Galvão, Wagner Vilela Júnior, João Caetano Neto and Wesley P. Calixto	Optimizing of the Insertion of Distributed Generation into a Power Distribution Network	1141-1146
57	Jose Luiz F. Barbosa, Geovanne P. Furriel and Wesley P. Calixto	Improved Optimization Methodology for High Power LED Matrix Luminaire	1147-1151
58	Karen Rezende, Luann Rodrigues, Pedro H. Maione Campos, Wesley Pacheco Calixto and Geovanne Pereira Furriel	Technique development to improve electrical grounding systems performance.	1152-1157

Track 14 (NExT-Brasil (Invited session) – continuation)

Paper #	Authors	Title	Pages
59	Júnio S. Bulhões, Alfredo O. Assis, Cristiane L. Martins, Geovanne P. Furriel, Brunna C. R. Silva, Luann Rodrigues, Márcio R. C. Reis, Débora F. Calheiros, Márcia D Oliveira and Wesley P. Calixto	Gap Filling in Time Series: A New Methodology Applying Spectral Analysis and System Identification	1158-1164
60	Antonio P. Castro Junior, Wesley P. Calixto, Viviane M. Gomes, Lais F. A. Silva, Pedro H. M. Campos, Ernesto F. Veiga, Jose Luiz F. Barbosa and Layza Castro	Ontology Applied in the Judicial Sentences	1165-1170
61	Márcio Reis, Wanderson Araújo, Wesley Calixto, Alana Magalhaes, Flávio Gomes and Gabriel Wainer	Nolinear Simulation Methodology for Switched Reluctance Machine Using Induction Profile Found By Parametric Regression	1171-1178
62	Lais F. A. Silva, Márcio R. C. Reis, Viviane M. Gomes, Júnio S. Bulhões, Michelle C. Silva, Brunna C. R. Silva, Rodrigo E. Costa, Aylton J. Alves, Everton L. Aleixo and Wesley P. Calixto	Socioeconomic, scientific and technological indicators as parameters for prediction model	1179-1184
65	Brunna Silva, Geovanne Furriel and Wesley Calixto	Devices Analysis And Artificial Neural Network Parameters for Sign Language Recognition	1185-1189
66	Luane Schiochet Pinto, Elder Geraldo Domingues, Daywes Pinheiro Neto, Fabricio Paiva Vieira, Simone Ramalho, Martin Heinz Eugen Tschudin and Giordani Pacifico Medeiros	Risk Analysis of the Electric Power Generation Potential from Biogas Coming from Vinasse Biodigestion	1190-1195
67	Giordani Medeiros, Elder Domingos, Daywes Pinheiro Neto, Airon Herbert Stach, Alessandro Costa, Luane Pinto, Wesley Calixto and Martin Tschudin	Technical and economic feasibility of using microturbines for the energy utilization of landfill gas	1196-1202
69	Attyla Lino, Brunna Silva, Danilo Rocha, Geovanne Pereira Furriel and Wesley Calixto	Performance of Haar and LBP features in Cascade Classifiers to whiteflies detection and counting	1203-1208
76	Geovanne Furriel, Calebe A. Matias, Sergio B. Oliveira, Jose G. Da Silva, Marcelo G. Narciso and Wesley Calixto	Acoustics applied in precision agriculture	1209-1213
193	Gilberto De Melo Junior, Sanderson M. Oliveira, Wesley P. Calixto, Cintia C. Ferreira, Geovanne P. Furriel and Ênio P. Vasconcelos Filho	Evaluation techniques of Machine Learning in task of reprovision prediction of Technical High School students	1214-1220
217	Erickssen B. De Melo, Gilberto De Melo Junior, Wesley P. Calixto and Márcio R. C. Reis	An application of genetic algorithm and the Serial Schedule Generation Scheme for solving the Resource-Constrained Project Scheduling Problem	1221-1226

Track 15 (GRSS-Geoscience and Remote Sensors (Invited session))

Paper #	Authors	Title	Pages
261	Daniel Icaza, Fernando Flores, Hector Conce, Flavio Conce and Bolivar Jara	System for the Monitoring of Earth and Rock Flows due to overflows of high risk sites supported in Telecommunications Networks.	1227-1231
265	Gustavo Schleyer, Felipe Cid, Paulo Gallardo, María Elisa Arroyo, Marygrace Balinos and Cayetano Espinosa	Citizen Science for Wildlife Monitoring Support	1232-1237

Track 16 (IEEE ABB (Invited Session))

Paper #	Authors	Title	Pages
56	Williams Flores-Guerrero, Hugues Renaudineau and Samir Kouro	Microinverter based on series connected submodular photovoltaic power cells	1238-1243
174	Marco Oyarzo	Adaptive Control System for Energy Efficiency in Electric Marine Propulsion	Not exposed in CHILECON
183	Daniel Sánchez, Antonio Sánchez-Squella, Álvaro Orellana, Dhruv Shah and Fernando Yanine	Design and testing of an on-grid power converter used to connect a variable speed low voltage generator	1244-1250
280	Carlos Rojas, A. Iriarte, Mara Cea and Juan Pablo Cardenas-R	Thermal insulation materials based on natural fibers waste for application in sustainable buildings	Not exposed in CHILECON

Track 17 (SSN (Invited Session))

Paper #	Authors	Title	Pages
289	Caterina Munoz, Francisco Cifuentes, Francisco Montoto and Javier Bustos-Jiménez	Building a Threshold Cryptographic Distributed HSM with Docker Containers	1251-1255
291	Fabio Lima, Marcia Paiva and Marcelo Segatto	Linear Time Optimal Amplifier Placement on OTNs	1256-1261
292	Daniela Bertolini Depizzol, Marcia Helena Moreira Paiva and Marcelo Eduardo Vieira Segatto	Evaluating Community Detection Methods in a Controlled Experiment	1262-1267
294	Rogério Alves, Marcos Rodrigues, Marcia Paiva and Marcelo Segatto	A Note on Resilience of Telecommunication Networks	1268-1273