Dr. Claudio I. Estevez, **PhD**

Electrical and Computer Engineer, Telecommunications

About me

Telecommunication engineer with over 20 years of experience across academia and industry, combining deep technical expertise with leadership in research, program coordination, and system design in both optical and wireless communication systems.

Personal

Claudio I. Estevez
Nationality: Chilean

Areas of specialization

Telecom • Access Networks • mm-Wave Technology • Transmission Control Protocol

Interests

IoT • Smart Cities • Energy-efficient Networking • eHealth

Languages

English	fluent
Spanish	fluent
French	A2 CEFR

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+56 9 7215 3355
Willing to relocate

Work

Experience working in all sectors (academia, private, and government). +20 years of experience.

Education

2009 **Ph.D. Doctoral Degree**
Electrical and Computer Engineering
Minor: Computer Science
Georgia Institute of Technology
Ranked **4th** worldwide in Engineering (US News 2025)

2003 **Master of Science Degree**
Electrical and Computer Engineering
Minor: Optics
University of Alabama in Huntsville
Ranked **97th** worldwide in Engineering (US News 2025)

2001 **Bachelor of Science Degree**, *Magna Cum Laude*
Electrical and Computer Engineering
University of Puerto Rico
Ranked **38th** worldwide in Undergraduate Engineering (no doctorate) (US News 2025)

Work Chronology

2010–present **Professor**
Universidad de Chile · Santiago, Chile
Served as Professor and Coordinator of the Masters in Communication Networks (MIRC) program, leading the restructuring of the Communications technical area and designing the 'Broadband Access Networks' curriculum. In this role, I secured self-sustaining funding for the program and established global academic alliances. Additionally, I conducted research within the 5G laboratory in collaboration with its sponsor, Entel. I held leadership positions in diverse projects related to Seismic Analysis, Satellite Networks, AI in eHealth, and Smart Transport.
Sector: Academia

2008–2009 **R&D Engineer – DARPA Project**
Rockwell Collins, Inc. · Cedar Rapids, IA
Worked on a proprietary high-speed optical power amplifier project funded by DARPA, aiming to reduce aircraft weight by transitioning to optical systems. As Second-in-Command to the lead designer, I bridged design gaps, conducted experiments to gather performance data, and proved project feasibility. This work led to the project's approval for the development phase, securing a multimillion-dollar budget.
Sector: Private

2003 **Field Evaluation Engineer**
Federal Aviation Administration · Washington, DC
Conducted on-site testing and validation for critical aviation systems across the US. At Pullman-Moscow Regional Airport (WA), I performed testing to approve the Transponder Landing System (TLS), allowing the previously rejected system to be certified. Additionally, I inspected emergency communication infrastructures at Southwest Florida International Airport following landline failures.
Sector: Government

Consulting

Consulting

The government consulting jobs (1st and 3rd entries) are very prestigious positions. (1st entry) Only a few experts and government officials are selected to determine future regulations. (3rd entry) for the FOA project, only one academic expert in the whole country is selected to oversee the final stages of the project.

Expert Panelist & Technical Advisor 2024

★ *Ministry of the Environment, Government of Chile*
Served on the technical panel that developed and ratified the national standard for electromagnetic radiation emissions from telecommunications equipment (Supreme Decree N°5/2024), establishing new binding industry regulations.

Course Designer 2022

Enovus+, Bridge between Academia and Businesses
Designed a 5G course for Enovus+, which is a company that provides private targeted lectures and strategic plans to businesses.

Academic Representative of the Chilean Government 2019

★ *Comunicación y Telefonía Rural (CTR)*
Provided expert oversight for the final stages of the Austral Fiber Optic (FOA) project. Responsibilities included architectural validation and direct technical consultations with primary vendors (Huawei Marine Networks) in China.

Lead Curriculum Designer 2018 - 2019

INACAP National Higher Education Institution
Spearheaded the complete curriculum design for two national degree programs: 'Telecommunications, Connectivity, and Networks Engineering' and the corresponding Technician program, from foundational courses to advanced specializations.

Projects

Projects

Projects cover a wide range of topics, including: AI, machine learning, satcom, transportation, microgrid (energy), data mining, and modulation techniques. Lead role in many projects. Team effort is required for associate researcher roles.

2023–present	**Alternate Director** FONDEF IT · Santiago, Chile "Automatic detection and classification of seismological events using advanced machine learning methods" Funds: $200M CLP (200k USD), Code: IT23I0036
2021–2023	**Associate Researcher** STIC-AMSUD · Santiago, Chile "SAtellite Networks Architectures Protocols and Informatics" Funds: $100M CLP (100k USD), Code: 21-STIC-12
2020–2021	**Associate Researcher** REC Subdirectorate · Santiago, Chile "AI for detecting and monitoring respiratory distress during COVID-19 via telephone networks" Funds: $100M CLP (150k USD), Code: COVID0365
2017–2019	**Associate Researcher** ERANet LAC · Santiago, Chile "RETRACT: Resilient urban transportation in smart cities" Funds: $50M CLP (75k USD), Code: ELAC2015/T10-0761
2014–2015	**Associate Researcher** Innova-CORFO L1 · Santiago, Chile "Microgrid Control System" Funds: $20M CLP (40k USD), Code: 13IDL1-25683
2013–2015	**Alternate Director** FONDEF IDeA · Santiago, Chile "Data mining algorithms for crisis prediction in pediatric patients" Funds: $120M CLP (240k USD), Code: CA13I10300
2012–2015	**Main Director** FONDECYT Iniciación · Santiago, Chile "Energy-self-sustainable multiplexing for 60 GHz millimeter-wave access" Funds: $48M CLP (100k USD), Code: 11121655
2011–2012	**Main Researcher** Project U-Inicia · Santiago, Chile "Millimeter-wave wireless access with fiber-optic backbone for full-duplex 1+ Gbps" Funds: $10M CLP (20k USD), Code: 11/14

Expertise

Experience

Accumulated over undergrad, masters, doctoral studies, internships, consultant work, and mainly teaching in academia.

Networking & Data Communications

Physical Layer *Wired:* Ethernet (all speeds), SONET/SDH, DSL, POTS, T1/E1, HFC, V.90. *Wireless:* Wi-Fi (802.11a/b/g/n), Bluetooth, WiMax.

Data Link Layer ATM, Frame Delay, MPLS, CDMA-CD, Ethernet, FDDI.

Network Layer IPv4 / IPv6, OSPF, RIP, ant routing algorithm.

Transport Layer TCP (Sack, New Reno), ESTP, XCP, HighSpeed TCP, Scalable TCP, UDP.

Application Layer HTML, FTP, DNS, DHCP, IMAP, SMTP, Telnet.

Carrier Ethernet *Design:* Architecture, VPNs, QoS. *Standards:* MEF Specs, DOCSIS.

Core Techniques *Modulation:* OOK, PSK, QAM, OFDM, OFDMA, SC-FDMA. *Multiplexing:* WDM, TDM, FDM, CDMA. *Scheduling:* Weighted fair, strict priority, round robin.

Optics & Photonics

Optical Interconnects Edge-emitting laser, VCSEL, laser-to-waveguide coupling, alignment sensitivity, TIA, wirebond limitation, plasma etching, UV polymerization.

Access Networks HFC, CWDM, FTTX (FTTC, FTTB, FTTH, FTTPC), PON (GPON, EPON, BPON), OLT, ONT.

Long-Haul Networks DWDM, ROADMs, SONET/SDH, dispersion compensation (DCF), EDFA, RAMAN amplifier, burst switching, solitons.

Additional Technical Areas

Hardware & Robotics Lithium battery performance, nitinol wires behavior & capabilities, microprocessor programming.

Digital Signal Proc. Filtering, image handling & restoration, video/sound compression, voice recognition, A/D-D/A conversion.

Wireless Systems Cellular communication networks, radar communication, GPS communication, WLAN networks.

Technical Skills

Hardware Experience

Hardware

Worked in cleanrooms developing VCSEL optical circuitry, in networking labs, consulting work in private companies, and projects with robotics.

Optical Interconnect
Manual wirebonder, plasma etching tool & pen, UV exposure tools, programmable spin coater, vacuum laminator, surface profile meter, robotic & standard microscopes.

Networking
Routers (incl. wireless), repeaters, bridges, hubs, switches, servers, proxy servers, modems, network cards, DNS/DHCP servers, DSLAM, connectors (RJ-45).

Fiber Optics
Optical spectrum analyzer, OTDR, EDFA, optical fiber spool handling, fusion splicer, polarizer, lenses, lasers & LEDs, optical couplers, fiber strippers.

Manufacturing
Industrial laser cutter, high-power programmable furnace, PCB circuit printing.

Robotics
STAMP microprocessor, nitinol wires, light sensors, acoustic sensors, stepper motors.

Electronics
Digital multimeters, oscilloscopes, LCR meters, function generators, arbitrary waveform generators, soldering stations, hot air rework stations, desoldering guns

IoT
Raspberry Pi, Arduino, ESP32/ESP8266, LoRaWAN/Bluetooth/GPS modules, GSM/LTE/NB-IoT shields, NFC/RFID readers, environmental sensors

Software

These are all software packages, except the first, which is the Linux module. This is to program custom communication protocols, mainly transmission control protocols (TCP). This allows to compare theoretical results with experimental/benchmark (real) results.

Software Skills

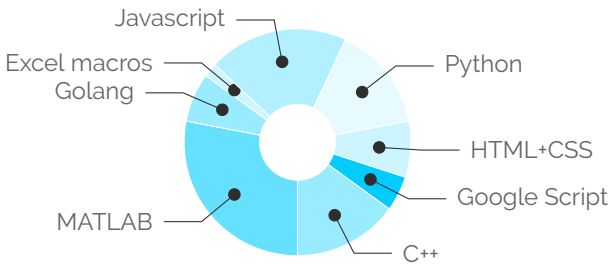
Linux Module Coding (C)	Open Source Operating System
Mathworks Matlab/Simulink	Advanced Programmable Mathematical Tool/Simulator
NI LabView	Data Acquisition and Controller
OPNET Modeler	Advanced Network Simulation
NS-2	Network Simulation
Cadence PSPICE	Advanced Electronic System Simulation
NI Multisim	Electronic System Simulation
Wolfram Mathematica	Advanced Symbolic Mathematical Solver
Mathsoft Mathcad	Symbolic Mathematical Solver
Autodesk AutoCAD	3D Model Design Editor
Ollama App & DeepSeek (and others models)	Powerful local LLM tool
ComfyUI	local AI generation tool for imaging, video, music, and chat

Programming

Programming is used for simulation, data analysis, and telemetry projects.

Programming Languages

Usage Frequency



Virtualization

Virtualization is mainly for high availability servers, creating isolated sandboxes, running an OS within another, and hosting services (web, files, other).

Virtualization & Cloud Skills

Amazon Web Services

Work with core services, including EC2, S3, VPC, and Lambda for serverless computing.

Google Cloud Platform

Proficient with Compute Engine, Cloud Storage, and Cloud Functions for scalable applications.

Microsoft Azure

Skilled in deploying Virtual Machines, service hosting, and developing with Azure Functions.

Hosting & Server Management

Self-Hosted Solutions

Experience with local server hosting, DNS forwarding, and server administration. Common tools: MySQL (database), Apache (server), Docker (services), PuTTY (interface), etc.

Doctoral Funding Awards

Awards

The National Presidential Fellowship was obtained each year of eligibility.

2007
National Presidential Fellowship
A competitive, fully-funded award for doctoral candidates.

2006
National Presidential Fellowship
A competitive, fully-funded award for doctoral candidates.

2005
National Presidential Fellowship
A competitive, fully-funded award for doctoral candidates.

2004
Society of Hispanic Professional Engineers (SHPE) Scholarship
A merit-based financial award for academic excellence in engineering.
National Presidential Fellowship
A competitive, fully-funded award for doctoral candidates.

2003
National Presidential Fellowship
A competitive, fully-funded award for doctoral candidates.

Thesis

1. **C. Estevez**, "Carrier Ethernet Network Solutions: Transport Protocol and Optical Backplane Design," PhD Thesis, Georgia Institute of Technology, published in 2010.

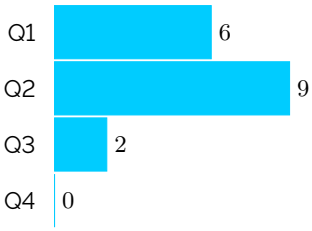
Book Chapters

1. **C. Estevez**, J. Wu, "Green Cyber-Physical Systems", Book Title: "Cyber-Physical Systems: Foundations, Principles and Applications" Editor: Houbing Song, Danda B. Rawat, Sabina Jeschke, Christian Brecher, Academic Press, 2016.
2. **C. Estevez**, Chapter Title: "Addressing Transport Layer Issues in Cloud Computing: A STEM Perspective," Book Title: "Cloud-Based STEM Education for Improved Learning Outcomes." Editor: L. Chao. IGI Global, 2016.
3. **C. Estevez**, C. Azurdia, S. Céspedes. Chapter Title; "The Internet of Interlaced Cyber-physical Things", Book Title: "Cyber Physical Systems: From Theory to Practice". Editors: D.B. Rawat, J. Rodrigues, I. Stojmenovic. Auerbach Publications, CRC Press, Taylor & Francis Group, 2015.
4. **C. Estevez**, Chapter Title: "Transporting the Cloud," Book Title: "Mobile Networks and Cloud Computing Convergence for Progressive Services and Applications." Editors: J. Rodrigues, K. Lin, and J. Lloret. IGI Global, 2013.

Journal Papers

ISI Journal Papers

Journal Quartile Distribution



1. F. Pesantez Diaz, **C. Estevez**, "Performance Evaluation of CF-MMIMO Wireless Systems Using Dynamic Mode Decomposition", *Telecom*, vol. 5, no. 3, pp. 846-891, 2024.
2. N. Ruminot, **C. Estevez**, V. D. P. Souto, R. D. Souza, S. Montejo-Sánchez, "Improving the Reliability of Lightweight Blockchain LPWAN Transmission Schemes", *IEEE Sensors Journal*, 2024.
3. E. Peña-Ancavil, **C. Estevez**, A. Sanhueza, M. Orchard, "Adaptive Scalable Video Streaming (ASViS): An Advanced ABR Transmission Protocol for Optimal Video Quality", *Electronics*, vol. 12, no. 21, article 4542, 2023.
4. N. Ruminot, **C. Estevez**, S. Montejo-Sánchez, "A Novel Approach of a Low-Cost Voltage Fault Injection Method for Resource-Constrained IoT Devices: Design and Analysis", *Sensors*, vol. 23, no. 16, article 7180, 2023.
5. D. Arias-Cazco, H. Rozas, D. Jimenez, M. E. Orchard, **C. Estevez**, "Unifying Criteria for Calculating the Levelized Cost of Driving in Electro-Mobility Applications", *World Electric Vehicle Journal*, vol. 13, no. 7, article 119, 2022.
6. X. Yu, Y. Qiao, Q. Li, G. Xu, C. Kang, **C. Estevez**, C. Deng, S. Wang, "Parallelizing Comprehensive Learning Particle Swarm Optimization by Open Computing Language on an Integrated Graphical Processing Unit", *Complexity*, 2020, pp. 1-17.
7. V. Quintero, A. Perez, **C. Estevez**, M. Orchard, "State-of-charge Estimation to Improve Decision Making by MAC Protocols Used in WSNs", *Electronics Letters*, 2019.
8. V. Quintero, **C. Estevez**, M. Orchard, A. Pérez, "Improvements of Energy-Efficient Techniques in WSNs: A MAC-Protocol Approach", *IEEE Communications Surveys & Tutorials*, 2018.
9. X. Yu, **C. Estevez**, "Adaptive Multiswarm Comprehensive Learning Particle Swarm Optimization", *Information*, 2018.
10. B. Torres, V. Quintero, **C. Estevez**, M. Orchard, C. Azurdia, "SoC control for improved battery life and throughput performance under VST-TDMA", *Electronics Letters*, 2017.
11. **C. Estevez**, C. Azurdia, S. Céspedes, "Overcoming Intrinsic Losses by Implementing a Physical-transport Cross-layer Control System for Low-SNR Links," *IEEE Communications Letters*, 2016.
12. **C. Estevez**, C. Azurdia, "60 GHz Millimeter-wave Bottom-Layer Solutions: Multiplexing Access, Energy Awareness, and Peak-to-Average-Power Ratio," *Latin America Transactions*, 2015.

13. C. Azurdia-Meza, H. F. Arraño, **C. Estevez**, and I. Soto, "Performance Enhancement of OFDM-Based Systems using Improved Parametric Linear Combination Pulses," *Wireless Personal Communications*, DOI 10.1007/s11277-015-2810-7, June 2015.
14. **C. Estevez**, C. Azurdia, "Bottom-layer Solutions for 60 GHz Millimeter-wave Wireless Networks: Modulation and Multiplexing Access Techniques," *Telecommunication Systems Journal*, 2015. DOI: 10.1007/s11235-015-0019-4.
15. J. Sandoval, A. Ehijo, A. Casals, **C. Estevez**, "New Model and Open Tools for Real Testing of QoE in Mobile Broadband Services and the Transport Protocol Impact: The Operator's Approach," *Latin America Transactions*, Volume 13, No. 2, pp. 546-551, February, 2015.
16. C. Liu, H.-C. Chien, Z. Gao, W. Jian, **C. Estevez**, A. Chowdhury, J. Yu, G.-K. Chang, "Optimization of Vector Signal Delivery over Double-Sideband Suppressed-Carrier Optical Millimeter-Waves through DC Coupling," *Photonics Technology Letters*, Volume 23, No. 12, pp. 789-791, June 15, 2011.
17. W. Jian, A. Chowdhury, Z. Jia, **C. Estevez**, G.-K. Chang, "Energy-Efficient Multi-Access Technologies for Very-High-Throughput Avionic Millimeter Wave, Wireless Sensor Communication Networks," *Journal of Lightwave Technology*, Volume 28, No. 16, pp. 2398-2405, August 15, 2010.

International Conference Papers

1. S. Kamal, C. A. Azurdia-Meza, **C. Estevez**, "Pulse Shaped SC-FDMA MIMO Systems with Reduced PAPR", *2024 IEEE Latin-American Conference on Communications (LATINCOM)*, pp. 1-6, 2024.
2. J. Solis, P. Palacios Játiva, C. A. Azurdia Meza, D. Zabala-Blanco, C. Gutiérrez, S. Kamal, **C. Estevez**, "On the performance of MIMO-VLC techniques in underground mining environments", *2023 IEEE Latin-American Conference on Communications (LATINCOM)*, pp. 1-6, 2023.
3. V. Quintero, **C. Estevez**, M. Orchard, A. Pérez, J. Y. Yu, X. Yu, "A Reliable and Simple Method to Estimate the Electric-Vehicle Battery State-of-Health", *2022 International Conference on Connected Vehicle and Expo (ICCVE)*, pp. 1-6, 2022.
4. H. Kang, D. Zabala-Blanco, C. A. Azurdia-Meza, **C. Estevez**, S. Kamal, A. Dehghan Firoozabadi, "Low PAPR mapping for 16-QAM OFDM-based systems", *2021 IEEE CHILEAN Conference on Electrical, Electronics Engineering, Information and Communication Technologies (CHILECON)*, 2021.
5. H. K. Kim, C. A. Azurdia-Meza, **C. Estevez**, "Antenna array synthesis through genetic algorithms for urban v2v communications: Preliminary results", *2020 Congreso Estudiantil de Electrónica y Electricidad (INGELECTRA)*, pp. 1-5, 2020.
6. V. Quintero, A. Pérez, **C. Estevez**, "Design of a DuC-based MAC Protocol Considering Information Associated to the Battery", *2020 IEEE Latin-American Conference on Communications (LATINCOM)*, pp. 1-5, 2020.
7. V. Komasilovs, A. Zacepins, A. Kviesis, **C. Estevez**, "Traffic Monitoring using an Object Detection Framework with Limited Dataset", *International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS)*, pp. 291-296, 2019.
8. V. Quintero, A. Pérez, **C. Estevez**, M. Orchard, "Sleep time adjustment through performance indicators of a lithium-ion battery", *2019 Prognostics and System Health Management Conference (PHM-Paris)*, pp. 163-169, 2019.
9. J. M. González-García, **C. Estevez**, "Smart Hospital LoRaWAN-based Backup Network Design that Monitors Critical Emergency and Standby Resources", *2019 IEEE International Conference on E-health Networking, Application & Services (HealthCom)*, 2019.
10. V. L. Quintero, A. Perez, F. Jaramillo, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
11. V. L. Quintero, A. Perez, F. Jaramillo, **C. Estevez**, M. Orchard, "Procedure for selecting a transmission mode dependent on the state-of-charge and state-of-health of a lithium-ion battery in wireless sensor networks with energy harvesting devices", *Proceedings of the Annual Conference of the PHM Society*, 2018.
12. V. Komasilovs, A. Zacepins, A. Kviesis, E. Peña, F. Tejada-Estay, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
13. V. Komasilovs, A. Zacepins, A. Kviesis, E. Peña, F. Tejada-Estay, **C. Estevez**, "Traffic Monitoring System Development in Jelgava City, Latvia", *International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS)*, pp. 659-665, 2018.
14. S. Bolufé, C. A. Azurdia-Meza, S. Céspedes, S. M. Sanchez, R. D. Souza, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
15. S. Bolufé, C. A. Azurdia-Meza, S. Céspedes, S. M. Sanchez, R. D. Souza, **C. Estevez**, "Dynamic Beaconing using Probability Density Functions in Cooperative Vehicular Networks", *International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS)*, pp. 636-642, 2018.
16. P. Palacios, A. Castro, C. Azurdia-Meza, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
17. P. Palacios, A. Castro, C. Azurdia-Meza, **C. Estevez**, "SVD detection analysis in cognitive mobile radio networks", *2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, 2017.

18. V. Quintero, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
19. V. Quintero, **C. Estevez**, M. Orchard, "State-of-charge estimation to improve energy conservation and extend battery life of wireless sensor network nodes", *2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, 2017.
20. A. Sanhueza, H. Méric, **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
21. A. Sanhueza, H. Méric, **C. Estevez**, "Efficient video streaming rate control based on a deadline-sensitive selection of SVC layers", *2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, 2017.
22. V. Quintero, **C. Estevez**, "Frame retransmission using a modified VST-TDMA access protocol in Picocell/WPAN", *2017 IEEE 9th Latin-American Conference on Communications (LATINCOM)*, pp. 1-6, 2017.
23. E. Peña-Ancavil, F. Tejada-Estay, **C. Estevez**, A. Zacepins, V. Komasilovs, "Effect of street geometry on the vehicular traffic throughput and its impact on smart cities mapping design", *2017 International Smart Cities Conference (ISC2)*, pp. 1-6, 2017.
24. P. Palacios, A. Castro, C. Azurdia-Meza, **C. Estevez**, "Signal detection methods in cognitive mobile radio networks: a performance comparison", *IEEE Latin-American Conference on Communications (LATINCOM)*, 2017 Workshop, Guatemala, 2017.
25. C. A. Azurdia-Meza, **C. Estevez**, A. D. Firoozabadi, I. Soto, "Evaluation of the sinc parametric linear combination pulse in digital communication systems", *2016 8th IEEE Latin-American Conference on Communications (LATINCOM)*, pp. 1-5, 2016.
26. **C. Estevez**, J. Molina, C. A. Azurdia-Meza, "Subcarrier mapping distribution effect on single carrier FDMA transmissions", *2016 8th IEEE Latin-American Conference on Communications (LATINCOM)*, pp. 1-5, 2016.
27. **C. Estevez**, D. Vallejos, S.A. Ríos, P. Brockmann. "Toward Non-invasive Polysomnograms Through the Study of Electroencephalographic Signal Correlation for Remotely Monitored Cloud-Based Systems." In *Innovation in Medicine and Healthcare 2015*, pp. 483-492. Springer International Publishing, 2016.
28. F. Tejada, **C. Estevez**, A. Zacepins, V. Komasilovs, "Autoregressive dynamic mechanism for urban area microscopic traffic flow models", *2016 IEEE International Smart Cities Conference (ISC2)*, pp. 1-5, 2016.
29. **C. Estevez**, S. Céspedes, "Improving Performance of TCP-based Applications in Power Line Communications for Smart Grids", *IEEE LATINCOM 2015*, Arequipa, Peru, November 2015.
30. **C. Estevez**, J. Wu, "Recent Advances in Green Internet of Things", *IEEE LATINCOM 2015*, Arequipa, Peru, November 2015.
31. **C. Estevez** and C. Azurdia-Meza, "60 GHz millimeter-wave bottom-layer solutions: multiplexing access, energy awareness, and peak-to-average-power ratio," in *Proc. 6th IEEE Latin-American Conference on Communications, IEEE LATINCOM*, Cartagena de Indias, Colombia, Nov. 2014.
32. C. Azurdia, **C. Estevez**, "Nyquist Parametric Linear Combination Pulses with Better Performance," *9th International Symposium on Communication Systems, Networks & Digital Sign (CSNDSP)*, Manchester, UK, 2014.
33. J. Sandoval, A. Ehijo, A. Casals, **C. Estevez**, "New Model and Open Tools for Real Testing of QoE in Mobile Broadband Services and The Transport Protocol Impact: The Operator's Approach," *IEEE Latincom*, Santiago, Chile, 2013.
34. **C. Estevez**, M. Orchard, A. Kailas. "Improving throughput performance under an energy efficient multiplexing access scheme using time-of-failure prognosis." In *Proceedings of the 8th International Conference on Body Area Networks*, pp. 390-393. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering), 2013.
35. **C. Estevez**, S. Angulo, A. Abujatum, G. Ellinas, C. Liu, G.-K. Chang, "A Carrier-Ethernet oriented Transport Protocol with a Novel Congestion Control and QoS Integration: Analytical, Simulated and Experimental Validation," *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
36. **C. Estevez**, W. Jian, A. Kailas, D. Fuentealba, G.-K. Chang. "Very-High-Throughput Millimeter-Wave System Oriented for Health Monitoring Applications," *IEEE Healthcom*, Columbia, MO, June 2011.
37. W. Jian, **C. Estevez**, A. Chowdhury, Z. Jia, G.-K. Chang, "A Hybrid MAC Protocol Design for Energy-Efficient Very-High-Throughput Millimeter Wave Wireless Sensor Communication Networks," *Asia Communications and Photonics Conference and Exhibition*, Shanghai, China, December 2010.
38. **C. Estevez**, G. Ellinas, G.-K. Chang, "Ethernet Services Transport Protocol with Configurable-QoS Attributes for Carrier Ethernet," *ICST BROADNETS*, Athens, Greece, October 2010.
39. **C. Estevez**, D. Guidotti, G.-K. Chang, "A Novel Lightwave Device Integration and Coupling Process for Optical Interconnects," *59th Electronic Components and Technology Conference*, pp. 1859-1864, San Diego, CA, May 2009.
40. D. Guidotti, **C. Estevez**, S.-H. Fan, G.-K. Chang, "Reliability Considerations in Parallel Optical Interconnects," *59th Electronic Components and Technology Conference*, pp. 2081-2085, San Diego, CA, May 2009.
41. **C. Estevez**, G.-K. Chang, G. Ellinas, "Broadband Data Transport Protocol for Metro Ethernet Services," *IEEE SouthEastCon*, pp. 210-215, Atlanta, GA, March 2009.
42. **C. Estevez**, G. Ellinas, G.-K. Chang, "Broadband Data Transport Protocol Designed for Ethernet Services in Metro Ethernet Networks," *IEEE Globecom*, pp. 1-5, New Orleans, LA, November 2008.

43. S.-H. Fan, D. Guidotti, **C. Estevez**, G.-K. Chang; Y.-J. Chang; D.D. Lu, "Short-reach flexible optical interconnection using embedded edge-emitting lasers and edge-viewing detectors," *Proceedings of the SPIE - The International Society for Optical Engineering*, v 6899, 7 Feb. 2008, pp. 689905-1-11.
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