

# GUSTAVO JOSÉ GONZÁLEZ

## PERSONAL DATA

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**Date of birth:** 30<sup>th</sup> of October, 1982.

**Place of birth:** Bahía Blanca, Buenos Aires, Argentine.

**Nationality:** Argentine (native).

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## EDUCATION

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May 2007 - 2012	<b>Universidad Nacional del Sur</b> – Bahía Blanca, Argentina. Doctor of Sciences in Engineering. SUBJECT: Aspects of frequency synchronization in multicarrier communication systems.
March 2002 – March 2007	<b>Universidad Nacional del Sur</b> – Bahía Blanca, Argentina. Electronic Engineer.

Postgraduate courses in:

- Adaptive Signal processing
- Ultra-Wideband Communication Systems
- Wireless Channel Codification
- Statistical Signal Processing
- Signal Processing in Communications

## TEACHING EXPERIENCE

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Sep 2010 - present	Teaching Assistant of the subject “Fundamentals of Electric Circuits” (cod. 2720) at UNS. Resolutions: DIEC 228/10 and 285/13.
Jun 2009 - Aug 2010	Teaching Assistant of the subject “Circuits and Systems Analysis” (cod. 2502) at UNS. Resolution: DIEC 161/09.
March 2007 – May 2009	Teaching Assistant of the subject “Digital Signal Processing” (cod. 2803) at UNS. Resolution: DIEC 095/07 – 034/08 – 045/09.

## JOURNALS

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- G. Gonzalez, F. Gregorio , J. Cousseau, S. Werner, R. Wichman, "Data-Aided CFO Estimators Based on the Averaged Cyclic Autocorrelation", Signal Processing EURASIP, vol. 93, no. 1, pp. 217-229, Jan. 2013.
- G. Gonzalez, F. Gregorio, J. Cousseau, "CFO Compensation for OFDMA Systems Using Circular Banded Matrices", Latin American Applied Research (SPECIAL ISSUE - RPIC 2011), vol. 43, no. 3, July 2013.
- G. Gonzalez, F. Gregorio, J. Cousseau, R. Wichman, S. Werner , "Uplink CFO Compensation for FBMC Multiple Access and OFDMA in a High Mobility Scenario", (IN PRESS) ELSEVIER Physical Communication, Oct. 2013.

## INTERNATIONAL CONGRESS PRESENTATIONS

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- G. González, F. Gregorio, J. Cousseau, R. Wichman and S. Werner, "Cyclostationary Autocorrelation Based CFO Estimators", 19<sup>th</sup> European Signal Processing Conference (EUSIPCO), Aug. 2011, Barcelona, España. ISSN 2076-1465.
- G. González, F. Gregorio , J. Cousseau "Low Complexity Block-Based Unbiased Frequency Estimation", IEEE International Symposium on Circuits and Systems, ISCAS 2011, May 2011, Rio de Janeiro, Brasil. ISBN: 978-1-4244-9472-9

## NATIONAL CONGRESS PRESENTATIONS

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- Mercedes Puzio, Gustavo J. González, Fernando H. Gregorio y Juan E. Cousseau. "Block-Based Multiple Frequency Estimation Using Complex All-Pass Adaptive Notch Filters" XV Reunión de Trabajo en Procesamiento de la Información y Control", RPIC 2013, Universidad Nacional de Río Negro, Bariloche, Sep. 2013. ISBN: 978-987-27739-7-7, Published in CD-ROM.
- Mercedes Puzio, Gustavo J. González, Fernando H. Gregorio y Juan E. Cousseau. "Carrier Frequency Offset Estimation for OFDM-Based Cooperative Communications Systems" XIV Reunión de Trabajo en Procesamiento de la Información y Control", RPIC 2011, Facultad de Ingeniería de la Universidad Nacional de Entre Ríos, Entre Ríos, Nov. 2011. ISBN: 978-950-698-280-5, Published in CD-ROM.
- Gustavo J. González, Fernando H. Gregorio y Juan E. Cousseau. "CFO Compensation for OFDMA Systems Using Circular Banded Matrices" XIV Reunión de Trabajo en Procesamiento de la Información y Control", RPIC 2011, Facultad de Ingeniería de la Universidad Nacional de Entre Ríos, Entre Ríos, Nov. 2011. ISBN: 978-950-698-280-5, published in CD-ROM.
- Gustavo J. González, J. Cousseau, F. Gregorio, R. Wichman y S. Werner. "Single-Carrier Cyclic-Extension Block DFE in Time Varying Channels" Congreso de la EAMTA, Inst. Balseiro y Centro Atómico Bariloche, Bariloche. Oct 2009. ISBN: 978-1-4244-4835-7.
- Gustavo J. González, J. Cousseau, F. Gregorio, R. Wichman y S. Werner. "A study of OFDM signal detection using cyclostationarity" XIII Reunión de Trabajo en procesamiento de la Información y Control, Fac. de Ciencias Exac, Ing. y Agrim. de la Univ. Nac. de Rosario, Rosario. Sep 2009. ISBN: 950-665-340-2, published in CD-ROM.
- Gustavo J. González, Favio R. Masson y Pablo S. Mandolesi. "Nodo para redes de sensores basado en el estándar IEEE 802.15.4" XII Reunión de Trabajo en Procesamiento de la Información y Control, Univ. Nac. de la Patagonia Austral, Rio Gallegos, Oct. 16 to 18, 2007. ISBN: 978-987-1242-23-8, published in CD-ROM.

## RESEARCH POSITIONS AND GRANTS

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October 2013	Researcher of the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET, Argentina)
April 2012- October 2013	<b>Postdoctoral</b> SUPERVISOR: Dr. Juan E. Rousseau PLACE: Instituto de Investigaciones en Ingeniería Eléctrica "Alfredo Desages", Universidad Nacional del Sur. (Argentina) INSTITUTION: CONICET OBJETIVE: Postdoctoral studies.
April 2010 – April 2012	<b>Postgraduate Class II</b> SUPERVISOR: Dr. Juan E. Rousseau PLACE: Instituto de Investigaciones en Ingeniería Eléctrica "Alfredo Desages", Universidad Nacional del Sur. (Argentina) INSTITUTION: CONICET OBJETIVE: Conclude PhD studies.
May 2007– March 2010	<b>Foncyt PICT 2004 Nro. 21723</b> SUPERVISOR: Dr. Juan E. Rousseau PLACE: Department of Electrical and Computer Engineering, Universidad Nacional del Sur. (Argentina) INSTITUTION: ANPCyT OBJETIVE: Begin PhD studies.

## PARTICIPATION IN RESEARCH GROUPS

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- **Member of** (PIP 2012-2014 GI- CONICET) "Aspects of last generation broadband wireless transceivers design". Head: Juan E. Rousseau (UNS), Co-head José Luis Figueroa. 2012/2014.
- **Member of** (SA/11/04) "Signal processing techniques for power efficient and low cost communication systems". Supported by Ministry of Science and Technology, Argentina for research cooperation between LaPSyC, DIEC - UNS and Faculty of Engineering, University of Pretoria, South Africa. Head: Juan E. Rousseau (UNS), Sunil Maharaj (University of Pretoria). 2012/2015.
- **Member of** (PICT-2008-0182) - "Advanced Signal Processing Techniques for RF imperfection reduction in Last Generation Communication Systems". Head: Juan E. Rousseau (UNS). 2010/2012
- **Member of** (PIP 112-200801-01024 - CONICET) "Advanced Signal Processing Techniques with Application in Telecommunications". Head: Juan E. Rousseau (UNS). 2009/2011
- **Member of** "Theory and Applications of the Adaptive Signal Processing" of the: Department of Electrical and Computer Engineering, Universidad Nacional del Sur. Head: Dr. Juan E. Rousseau – Dr. Pedro D. Doñate. Code 24/K035 – 2008 and 24/K043 - 2009/2012.
- **Member of** (PIP #6344 - CONICET). "Equalization, Detection and Estimation of Signals in Digital Data Transmissions over Communication Channels." Head: R. Milocco (UNCo). Network: C. Muravchik (UNLP), J. Rousseau (UNS), C. Galarza (UBA), M. Hueda (UNC). CONICET, 2004/2007.
- **Member of** "Signal Processing in Last Generation Communications" Scientific and Technological Research, PICT-FONCYT (PICT 2004 –Code 21723), given by ANPCyT, Department of Electrical and Computer Engineering, Universidad Nacional del Sur. Head: Juan E. Rousseau. 2005/2008.

## **LANGUAGES**

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### **ENGLISH**

- LEVEL Upper - Intermediate. Jacksonville Institute. Bahía Blanca. 3rd year certificate
- LEVEL B2. English Program of the Universidad Nacional del Sur, Bahía Blanca. Courses “English for Science and Engineering” y “How to Survive in English”.