ENGR. ANTONIO SAN PEDRO GONZALES JR.

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EDUCATION

1996 - 1999	**DE LA SALLE UNIVERSITY**	

2401 Taft Avenue, Manila
Master of Engineering
Major in Electronics and Communications
DOST-ESEP Government Scholar

1988 - 1993   **UNIVERSITY OF THE EAST**
Samson Road, Kalookan City, Metro Manila
Bachelor of Science in Electronics and Communications Engineering

1984 - 1988   **ST. JAMES ACADEMY**
Plaridel, Bulacan

1978 - 1984   **ST. JAMES ACADEMY**
Plaridel, Bulacan

WORK EXPERIENCE (22 years teaching experience)

Aug . 2010 – Present   **Teaching Assistant,**
QATAR UNIVERSITY
Electrical Engineering Department
College of Engineering
P.O, Box 2713, Doha, Qatar

Nov. 2008 – Dec. 2010   **Laboratory Technical Instructor,**
IBRA COLLEGE OF TECHNOLOGY
Electrical and Electronics Section, Engineering Department
Sharqiya Region, Ibra, Oman

Jan. 2000 – Nov. 2008   *Assistant Professor,* DE LA SALLE UNIVERSITY
Electronics and Communications Engineering Department
2401 Taft Avenue, Manila

July 1994 – Dec. 1999   *ECE Instructor,* UNIVERSITY OF THE EAST
Electronics and Communications Engineering Department
Samson Road, Kalookan City, Metro Manila

Subjects Taught:

1. Basic Electronics (Diodes, BJT and FET Amplifiers, etc.)
2. Advanced Electronics (Operational amplifier circuits, Negative feedback amplifiers, filters, etc.)
3. Electronics Instrumentation and Measurements (Data acquisition system design)
4. Industrial and Power Electronics (SCR, DIAC, TRIAC, Switch mode power supplies, Power converters, etc)
5. CMOS Analog IC Design (Operational amplifier design using MOSFETS, nMOS and pMOS)
6. Biomedical Instrumentation. (ECG circuits, Blood pressure measurements, Body temp, etc.)
7. C/C++ Programming (Software development using C/C++ language)

Equipments Handled:
1. Analog Volt-Ohm-Milliammeter
2. Digital VOM
3. LCR Meter
4. Tektronix Four-Channel Mixed Digital Oscilloscope
5. Frequency Spectrum Analyzer
6. Bode Plotters
7. Arbitrary Waveform Generator
8. Siemens Programmable Logic Controllers
9. NI – USB 6009 / 6259 Interface Adapter
10. NI – ELVIS II$^+$
11. RC10 – FPGA Board

Other Skills:
1. Proficiency in Electronic simulation software (Multi-sim workbench, SPICE, Electric)
2. Proficiency in Matlab Software
3. Proficiency in PCB Layout Design Using EAGLE software
4. Proficiency in Visual C/C++
5. Proficiency in LabVIEW software
6. Knowledgeable in PLC programming.

PUBLICATIONS:
Journal Papers:
1. *A Novel PLL Resolver Angle Position Indicator*
   IEEE Transactions on Instrumentation and Measurements, ***13 July 2015.***
2. *Performance Prediction of Solar PV Applied to Doha*, Renewable Energy – Elsevier, *26 May 2015*.
3. *Amplitude to Phase Conversion Based on Analog Arcsine Synthesis for Sine-cosine Position Sensors.* IFSA-2015 Journal on Sensors and Transducers, ***October 2015.***

Conference Papers:
1. *Simple and Precise Analog Arcsine Synthesis Applied to Amplitude to Phase Conversion for Hall Effect Position Sensors*
   IARIA – Sensor Devices 2015, "The Sixth International Conference on Sensor Device Technologies and Applications".
   Venice, Italy, ***23 – 28 August 2015***
   ISBN: 978-1-61208-426-8
2. *Angular position measurement using resolvers together with a robust linearization technique*
   INDIN 2015, 13th IEEE International Conference on Industrial Informatics
   Cambridge, UK , ***22 – 24 July 2015***
3. *A New Fast Tracking Resolver for Mechanical Angle Measurement*
   IEEE Africon 2013 "Sustainable Engineering for a Better Future"
   Le Meridien, Mauritius, ***9 – 12 September 2013***
   ISBN: 978-1-4673-5940-5
4. *A Novel Resolver Converter Based on a Modified Tracking Method.*
   2013 IEEE International Conference of Networking Sensing and Control
   Paris-Evry, France, ***10 – 12 April 2013.***
   978-1-4673-5199-7
5. *Hardware Module for the Telemedicine Informatics System*
   Empowering Human Resources in Biomedical Engineering in Developing Countries: For a Sustainable Health Care System.
   Copyright 2007 by Program Pascasarjana Teknologi Biomedis Univesitas Indonesia
   Grand Kemang Hotel – Jakarta, Indonesia
   ISBN : 978-979 – 16895 – 0 – 2 , ***24 October 24 2007***

Project Achievements:

1. Technical Supervisor in charge of the student's project entitled
   " ECG and Blood Pressure Monitoring Device "
   who won "**Best Scientific Merit Project"** award in the recently concluded
   "4th Engineering Students Gathering" held at the Sultan Qaboos University on 4-6 April 2010.
2. Technical Supervisor in charge of the student's project entitled
   " ECG Data Acquisition System "
   won First Place during the 1st Technological Engineering Gathering held at Higher College of Technology Muscat, 16 – 18 May 2009 (http://www.ict.edu.om)
3. Professor in charge of the Thesis entitled
   " SMS for the Blind Using PIC Micro-controller "
   "**Most Promising Invention Award**", and "**2nd Place Over all**"
   in 2003 National Invention Contest by the Department of Science and Technology, Philippines.
4. Supervisor in charge of the Thesis entitled
   " Electronic Olfaction System for Aroma Identification "
   "**Gold Thesis Award**"
   Academic School Year 2002, De La Salle University Manila

LICENSURE EXAMINATION TAKEN AND PASSED

Name of Examination	*Date Taken*	*Rating*
ECE Board Exam	April 1994	74.75%

PROFESSIONAL & CO-CURRICULAR ACTIVITIES

1991 – 1994   **STUDENT MEMBER,** The Institute of Electronics and Communications Engineers of the Philippines (IECEP)

1994 up to present   **LIFETIME PROFESSIONAL MEMBER,** The Institute of Electronics and Communications Engineers of the Philippines (IECEP)

Completed Research Papers:

1. Toll-way System Software Using Turbo C/C++
2. Electronic Olfaction System for Aroma Identification
3. SMS for the Blind Using PIC Microcontroller
4. Hardware Module for the Telemedicine Informatics System (Acquisition of ECG Signal with Labview Software Interface)

SEMINARS, CONVENTIONS AND TRAININGS ATTENDED

6 June – 7 June 2012   Rapid Prototyping Workshop
                        Organized by ESCWA Training Center.
                        Texas A&M University at Qatar
                        Doha, Qatar

26 March 2012   Workshop on Embedded Systems
                        Organized by the Department of Electrical Engineering.
                        Qatar University
                        Room E112 – Male Engineering Bldg.

13 November 2012   Methods and Applications of Brain Computer Interface
                        Organized by the Department of Electrical Engineering.
                        Qatar University

3 March 2011	Embedded Systems and System On Chip (SOC) Research in Qatar Organized by the Department of Electrical Engineering. Qatar University Room E113 – Male Engineering Bldg.
April 18, 2011	Renewable Energy Sources and Applications Qatar University Room I-111 Male Engineering Bldg.
Feb 28 – May 19, 2007	Development of Core Competencies in the Field of Biomedical Engineering Training European Union Asia Link Project KTH (Royal Institute of Technology) Kista, Stockholm, Sweden
Feb 2, 2007	SITRAIN, Training for Automation and drives SIMATIC S7 – 200 PLC Handling and Programming (ST-7 MICRO) Siemens, Inc.17/F Salcedo Tower 169 H.V. Dela Costa Street, Salcedo Village, 1227 Makati City, Philippines
Nov 13 – Nov 15, 2006	Intel Asia Academic Forum Kuala Lumpur, Malaysia
Jan 23 – Jan 25, 2006	Bio-technology Workshop / UK – Singapore Partners in Science / Biopolis Center, Singapore
May 15 – 17, 2006	*Tissue Engineering: Cells and Technologies*, Ariston Estrada Seminar Room, De La Salle University – Manila
Nov. 28 – Dec. 2, 2005	*Biomedical Transducers, Development and Design*, Ariston Estrada Seminar Room, De La Salle University – Manila
Aug 29 – Sep 2, 2005	*Analysis of Biological Signals and Image Processing*, Ariston Estrada Seminar Room, De La Salle University – Manila
August 27 – 29 , 2005	*Modern VLSI Training (Microelectronics Design),* EEE Building UP Diliman, Quezon City
July 25 – 29, 2005	Introduction to Bioengineering, Biomaterial and Biomechanics of Soft Tissue, Tissue Engineering, Ariston Estrada Seminar Room, DLSU – Manila
August 22 – 26, 2005	Medical Electronics Design, Ariston Estrada Seminar Room, DLSU – Manila
Aug. 5, 2004	ABC's of Patenting and Inventing Adamson University, Manila.
Mar. 2002 – May 2002	Course of Instruction in Visual C++ 3.0 Module Informatics Computer Institute, Manila

Nov. 1998 – June 1999   R & D Engineer Practicumer
Micrologic Systems Inc., Kapitolyo, Pasig, Metro Manila

Oct. 11 – 15, 1999   Short Course on Digital Signal Processing
National Engineering Center, UP – Diliman Quezon City

SEMINARS, TRAININGS AND PRESENTATION CONDUCTED

October 24, 2007   ***Presentor,*** Hardware Module for the Telemedicine Informatics
System Asia Link International Conference on Biomedical
Engineering and Technology 2007
Grand Kemang Hotel – Jakarta, Indonesia

July 2004   ***Trainor,*** Zilog Encore Development Board
Velasco Bldg., Room 303A, DLSU – Manila

Nov. 2000 – Dec 2000   ***Lecturer,*** Switch Mode Power Supply Design
Velasco Bldg. Room 201 and Room 303-A, DLSU – Manila

Mar 14, 2001   ***Presentor,*** Graduate Forum
Velasco Bldg. Room 513, DLSU Manila