Jose Javier Gonzalez

Education

- 2015–2016 University of Michigan, Ann Arbor, Computer Engineering Exchange, 3.94/4.00.
 - Introduction to Machine Learning
 - o Cryptography and Network Security Elliptic Curve Cryptosystem
 - Parallel Computing Parallel Implementation of Interdependent Lindenmayer Systems
 - Information Retrieval Diagnostic Classification of Prevalent Cardiovascular Diseases
- 2012–2016 **Universidad Pontificia Comillas**, *Bachelor in Telematics Engineering*, Madrid, 9.95/10 Dean's list 1st of my major.
 - Bachelor Thesis A Simple Power Attack in the TwoFish Key Schedule
 - Microprocessors Three dimensional 8x8x8 Cube LED Display
 - Operations Research Optimal Placement of Cellular Communication Antennas

Work Experience

- 2016 Research Assistant, University of Michigan, Ann Arbor, MI, USA.
 - Part of the Machine Learning for Data Driven Decisions Laboratory
 - Developed a Heart Sound Classification algorithm based on Temporal Alignment Techniques and MFCC frequency analysis, achieving a 82.4% accuracy in the hidden data.
 - Worked in the Physionet Challenge 2016 for the *Computing in Cardiology Conference* and went to Vancouver to present the research.
- 2014–2015 Research Assistant, Institute for Research in Technology, Madrid, Spain.
 - Development of applications with Google Glass using Android, Java and the Mirror API.
 - Design of a QR-Based system for people with different disabilities using Google Glass as a platform to interact. The system achieved a 87% precision capturing gestures.
 - The application is now being used by children with special needs at a Spanish institution.
 - 2014 Software Engineer, Extreme Networks, New Hampshire, USA.
 - Service Architecture Development member, responsible for 2 firewall projects.
 - Integration of several third-party modules to the NetSight network monitor using Java.
 - Production software filters for the Paloalto Firewall, reducing unwanted requests by 68%.
 - 2013 Intern, Enterasys, Newbury, United Kigdom.
 - Introduction to computer networks and distributed systems.
 - Lab experience for the Data Link and Network layers.

Research

- 2016 **Heart Sound Classification based on Temporal Alignment Techniques**. *Jose Javier Gonzalez, Cheng Perng Phoo, Jenna Wiens*, Computing in Cardiology 2016
- 2016 A Simple Power Attack in the TwoFish Key Schedule, arXiv:1611.07109.

 Jose Javier Gonzalez Ortiz, Kevin J. Compton To be submitted at CHES2017

Awards

- 2016 Award for Excellence in the Bachelor's Degree, Universidad Pontificia Comillas.
- 2012–2016 **Excellence Scholarship**, *County of Madrid*, Awarded 4 years.
- 2015–2016 University Honors, University of Michigan.

2013 IMC 2013, Bronze Medal.

International Mathematics Competition (Blagoevgrad, Bulgaria)

2012 **OEF 2012**, Honorific Mention.

Spanish Physics Olympiad

Languages

Spanish Native German A2 Basic

English C1 Proficient - TOEFL 110/120

French A2 Basic

Technical Skills

Advanced C, Python, Java, LATEX, MATLAB, sklearn

Intermediate C++, Git, Verilog, Assembly, PBS, Linux/UNIX, SQL, Excel

Basic Haskell, R, Tensorflow, Javascript, GAMS, Spice

Diplomas

2012-Present Massive Online Open Courses, edX, Coursera.

- o Neural Networks for Machine Learning, University of Toronto
- Computation Structures, MIT
- o Algorithms: Design and Analysis, Stanford
- Cryptography I, Stanford
- o Introduction to functional programming, TU Delft
- Circuits & Electronics, MIT
- Autonomous Navigation for Flying Robots, TUM
- Quantum Mechanics and Quantum Computation, UC Berkeley

2012–2016 Diploma in Professional Skills, Universidad Pontificia Comillas.

Diploma covering topics in public speaking, teamwork, and effective technical communication

Activities

Data Science Member of Michigan Data Science Team, a student association that competes

against data scientists from around the world in online prediction challenges.

Open Source Ex-President Comillas Linux Association

Robotics Member of the Aerospace Robot Club Aerobot