FRANKLYN A. DIAZ, MSEE

Lawrenceville, GA 30044. Cell: (678) 231-0148; franklyn_diaz@hotmail.com

EDUCATION

Georgia Institute of Technology (GA Tech), Atlanta, GA.
***Master of Science Computer Science**. Started August 2019*

Cornell University, Ithaca, NY.
***Engineering Leadership Certificate*.** Expected *Graduation: 2021*.

Ga Tech Professional Education (GA Tech PE) -, Atlanta, GA.
***GA Tech Coding Bootcamp (Full STACK) Certificate**. Expected Oct 2021*

Gwinnett Technical College (Gwinnett Tech). Lawrenceville, GA.
Networking specialist / computer programming, Expected *Graduation: 2021*
Tutor for: program design and development, C++ I-II and JAVA I-II-III

University of South Florida, Tampa, Florida.
***Master of Science in Electrical Engineering.** Graduation: December 2000*.

Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic.
***Bachelor of Science in Electronics Engineering**. Graduation: May 1996.*

Motorola University, Professional Online Education.
Quality IQ: Yellow badge, August 2009
Quality IQ: "Quality competency development" Certificate Level II, Basic Statistics, August 2009.
***Quality IQ: White badge,** Quality IQ: "Quality competency development" Certificate Level I, Internet Security Awareness, Records Management, **Six Sigma Foundations**, Intro. to Product Security*, June 2008.
Kubernetes for app developers May, 2020

SKILLS

Operating Systems: Windows 10, LINUX [Ubuntu, Fedora] (30% user, 70% developer).
Programming: C++(exp); C(exp); JAVA J2SE (int); Assembly; serial/network communications, LABVIEW.
Tools: Cameo**,** Perforce**,** GIT, JIRA, Confluence, bitbucket, SVN, Eclipse, SourceSafe, Office, VS 2019, Project, Visio
Hardware: Intel-80xx micro-controllers; Intel 80xxx microprocessors, Broadcom 74XX, routers/switches.
Languages: English(fluent) / Spanish(fluent)

RESEARCH

Machine autom. and design of exp. for an ultrasound test in microelectronics CMP pads. (*Grad. Thesis*). Dec. 2000.
Referenced in:
https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=2263&context=etd (page 45 ref #1)
http://www.inaoep.mx/~jgob/hjg/2007/Primera/11_14.pdf (Page 22, Dr. W. Moreno's thesis #46)

PLC-NET: design and development of a programmable logic controller (PLC) and its network interface. Design and development of software and hardware using INTEL 8031 microcontroller. (***Undergraduate Thesis***). April 1996.

WORK EXPERIENCE

09/2019 – Today Georgia Tech Research Institute (GTRI) Atlanta, GA
Senior Research Engineer
Cameo modeler ● open standards ● project management ● systems design ● Software development

(1) Serve as technical expert on assigned projects to develop industry standards, systems interfaces, engineering tools and roadmaps for future updates.
(2) Develop prototypes of open-architecture systems for application in both military and commercial applications.
(3) Develop software prototypes to demonstrate the use-case for proposed and/or newly adopted open standard requirements.

- *ACHIEVEMENT: Helped develop/update/enhance models for open standards like OPAS, FACE, GRA, COARPS.*
- *ACHIEVEMENT: Provided technical expertise modeling systems and implementing software to realize those models.*
- *ACHIEVEMENT: Technical lead and designer of standard system for automation.*

05/2016 – 9/2019 Universal Avionics Systems Corp an Elbit System company Lawrenceville, GA
Senior Software Engineer
DO-178C ● Eclipse ● Avionics ● Project management ● Software design

(1) Perform software engineering tasks to develop software for embedded systems, utilized in advance flat panel flight instrumentation for a cockpit display system.
(2) Manage the internal flight simulator product. Development, integration, and quality control. Project used to aid engineers developing features for the cockpit software.
(3) Project software lead to develop software and direct day to day activities of one or more team members.
(4) Work with other software and hardware engineers as part of a project team using DO-178C processes.

- *ACHIEVEMENT: Added a debug procedure integrated in eclipse to test all software for the cockpit. This saves a lot of test time and greatly decreases test time in the real cockpit stations in the lab.*
- *ACHIEVEMENT: Added several multi engine and fixed engine aircrafts to the simulator software.*

05/2008 – 2/2016 ARRIS Group Lawrenceville, GA
05/2008 – 05/2013 – GOOGLE - Motorola Mobility. - Home & networks mobility Division, Lawrenceville, GA
Senior Embedded Software Engineer/ Senior QA Engineer

05/2007 – 1/2008 Paceomatic. Norcross, GA
Software Design Engineer

09/2000 – 10/2006 American Megatrends Inc. Norcross, GA
Software/BIOS engineer

01/1999-12/2000 USF, Center for Microelectronics Research. Tampa, FL.
Research Assistant *(Laser Restructuring Lab.[1], Defect engineering lab. [2])*

09/1998-12/1999 USF, Electrical Engineering Dept. Tampa, FL.
Controls Laboratory Teaching Assistant

11/1997 – 08/1998 Souriau corporation (FCI Electronics Americas), Santiago, Dominican Republic.
Manufacturing Engineer (staff)

PATENT

"Communications Channel Over LAN connection for software debugging" (patent pending). By using a communications channel over LAN in place of serial /parallel connection, the AMIBIOS debugger may perform debug operations on targets remote from the host. Operate targets by IP address.

PROJECTS

- Rapid prototyping of a home automation system using FPGA'S. April 2000.
- Design and simulation of a 16-bit microprocessor using VHDL. April 1999.
- Design and development of a PLC and its network. PUCMM, May 1996 (degree project).
- Installation of an industrial burner gate controller using pyrometers. Falconbridge Dom, August '94.

PUBLICATIONS

- *"Non-destructive evaluation of CMP pads using scanning ultrasonic technique"*, Procs. 198th ECS, Phoenix, 2000
- *"Integrating instructional technology methodologies in a state-of-the-art industrial control laboratory"*. Publication for Remote teaching technologies Symposium, University of south Florida, March 24, 2000.
  Referenced in: IESTEC - Diaz publications (reference #13) ACM digital library
- *"Prototype of a Remote Industrial Controls Lab. via the Internet".* IASTED Conf., Santa Barbara, CA, Oct 1999.
- *"Development of a Prototype for Electrical Engineering Remote Labs via Internet".* ITHERM 98 Seattle, WA.