FRANKLYN A. DIAZ, MSEE

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EDUCATION



Georgia Institute of Technology (GA Tech), Atlanta, GA. Master of Science Computer Science. In progress.

Massachusetts Inst. of Technology (MIT) - Executive Ed., Ithaca, NY. *Professional Cybersecurity Certificate*. In Progress.



Harvard University - , Cambridge, MA. *Leadership & Management Certificate*. In Progress.



Cornell University, Ithaca, NY.

Engineering Leadership Certificate. Graduated: Dec 2021.



GA Tech Professional Education (GA Tech PE) -, Atlanta, GA.

GT Coding Bootcamp (FULL STACK) Certificate. Graduated: Oct 2021



University of South Florida, Tampa, Florida.

Master of Science in Electrical Engineering. Graduated: Dec 2000.



Pontificia Universidad Católica Madre y Maestra, Santiago, Dom Rep. *Bachelor of Science in Electronics Engineering. Graduated: May 1996.*

Gwinnett Technical College (Gwinnett Tech). Lawrenceville, GA.

Networking specialist / computer programming, Expected Grad: 2022

Tutor for: Program Design and Development, C++ I-II and JAVA I-II-III

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 GTRI Management Certificate. Grad. Oct 2021.

MS Project Microsoft Project Foundations: Schedule Planning & Performance Controls. Aug 2021 Microsoft Excel level 1-3. Completed June 2021.

Microsoft Project Foundations: Schedule Planning & Performance Controls Workshop. Completed July 2021

SKILLS

Project Mgmt./Tools: JIRA, Confluence, Project, Cameo, GIT, Bitbucket, Eclipse, Visio, Office, VS code. **Operating Systems:** Windows, LINUX [Ubuntu, Fedora].

Prog./Frameworks:C++, C, JAVA, JavaScript, Python, Node, REACT, SQL, SpringBoot,ASM, LABVIEW.

Hardware: Intel microcontrollers; Intel microprocessors, Broadcom 74XX, routers/switches.

Languages: English(fluent) / Spanish(fluent)

RESEARCH

Machine autom. and design of exp. for ultrasound test in microelectronics CMP pads. *Grad. Thesis* Dec. 2000. Referenced in: https://scholarcommons.usf.edu (page 45 ref #1) INOAEP (Pg. 22, Dr. 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. *Thesis* April 1996.

WORK EXPERIENCE



01/2022 – Today Raytheon Missile & Defense Tampa, FL

Principal Software Engineer

- (1) Agile development methods, Scrum master / Product Owner experience, project management, CD/CI
- (2) Model Driven Development, OO software development
- (3) Experience in communications methods and protocols
- (4) OS configuration and system security-hardening
- (5) Experience with C++, JAVA, Python, html, JavaScript, NODE, REACT

Georgia Research 09/2019 – 01/2022 Georgia Tech Research Institute (GTRI) Atlanta, GA Senior Research Engineer

Cameo • Open Standards • Project Mgmt. • Systems Design • Software Development • MS Project

- (1) Technical expert to develop industry standards, systems interfaces, engineering tools and roadmaps.
- (2) Develop prototypes of open-architecture systems for military and commercial applications.
- (3) Develop software prototypes to demonstrate the use-case for newly adopted open standards.
- ACHIEVEMENT: Helped update/enhance models for open standards: OMS, OPAS, FACE, GRA, COARPS.
- ACHIEVEMENT: Modeling systems technical expert, implementing software to realize those models.
- ACHIEVEMENT: Technical lead and designer of standard systems for automation.



05/2016 – 9/2019 Universal Avionics Systems Corp / Elbit System Lawrenceville, GA Senior Software Engineer

DO-178C • Eclipse • Avionics • Project Management • Software Design

- (1) software for embedded systems, for flat panel flight instrumentation for a cockpit display system.
- (2) Manage the internal flight simulator product. Development, integration, and quality control.
- (3) Project software lead, direct day to day activities of team members, Work with DO-178C processes.
- ACHIEVEMENT: Added a debug procedure integrated in eclipse to test all software for the cockpit
- 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. - Lawrenceville, GA Senior Embedded Software Engineer / Senior QA Engineer

Paceomatic. Norcross, GA - Software Design Engineer
American Megatrends Inc. Norcross, GA - Software/BIOS engineer
USF, Center for Microelectronics Research. Tampa, FL. Research Assistant (Laser Lab, Defect Eng. lab)
USF, Electrical Engineering Dept. Tampa, FL. - Controls Laboratory Teaching Assistant
Souriau corporation, Santiago, Dominican Republic. - Manufacturing Engineer (staff)

PATENT

"Communications Channel Over LAN connection for software debugging". By using a communications channel over LAN, the AMIBIOS debugger performs TCP/IP debug operations on remote targets.

PROJECTS

- o 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).

PUBLICATIONS

- o "Non-destructive eval. of CMP pads using scanning ultrasonic technique", 198th ECS, Phoenix, 2000
- o "Integrating instructional technology methodologies in a state-of-the-art industrial control laboratory". Publication for Remote teaching tech. Symposium, USF, March 24, 2000. <u>IESTEC</u> (ref. #13) <u>ACM</u>
- o "Prototype of Remote Industrial Control's Lab. via the Internet". IASTED, Santa Barbara, CA Oct '99.
- "Development of Prototype for Electrical Eng. Remote Labs via Internet". ITHERM 98 Seattle, WA.