FRANKLYN A. DIAZ, MSEE

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**EDUCATION**

[Georgia Institute of Technology](http://www.gatech.edu) ([GA Tech](https://www.cc.gatech.edu/)), Atlanta, GA. 

*Master of Science Computer Science. In progress.*



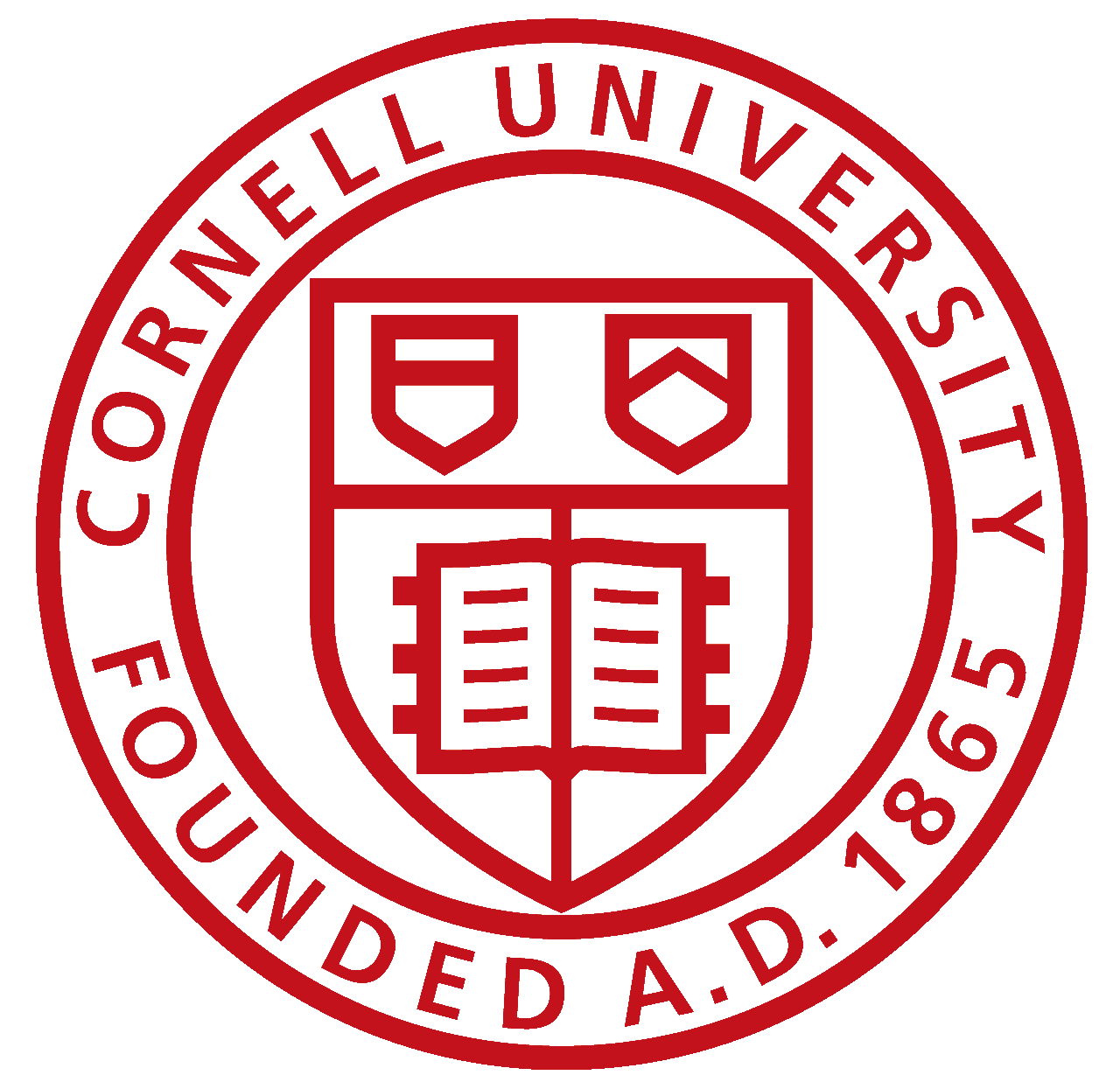
[Massachusetts Inst. of Technology (MIT)](https://web.mit.edu/) - Executive Ed., Ithaca, NY.

### [*Professional Cybersecurity Certificate*](https://executive-ed.xpro.mit.edu/professional-certificate-cybersecurity?utm_source=Google&utm_network=g&utm_medium=c&utm_term=cybersecurity%20mit&utm_location=1026339&utm_campaign=B-365D_US_GG_SE_PCCY_Brand&utm_content=MIT_BBT&gclid=CjwKCAjw8sCRBhA6EiwA6_IF4e4zicq-InY2yUXDHW236l7inIhEz0MImJHfR0857u41WfDa-ZDnuhoC5c4QAvD_BwE). In Progress.



[Harvard University](https://www.harvard.edu/) - , Cambridge, MA.

### [*Leadership & Management Certificate*](https://online.hbs.edu/subjects/leadership-management/). In Progress.

[Cornell University](http://www.cornell.edu/), Ithaca, NY.

### [*Engineering Leadership Certificate*](https://www.ecornell.com/certificates/leadership-and-strategic-management/engineering-leadership/). *Graduated: Dec 2021*.

[GA Tech Professional Education](https://pe.gatech.edu/) ([GA Tech PE](https://pe.gatech.edu/)) -, Atlanta, GA. 

[*GT Coding Bootcamp (FULL STACK) Certificate*](https://pe.gatech.edu/certificates/project-management-certificate)*. Graduated: Oct 2021*

[University of South Florida](http://ee.eng.usf.edu), Tampa, Florida.

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

[Pontificia Universidad Católica Madre y Maestra](http://www.pucmm.edu.do), Santiago, Dom Rep.

#### *Bachelor of Science in Electronics Engineering*. *Graduated: May 1996*.

Gwinnett Technical College ([Gwinnett Tech](http://www.gwinnetttech.edu)). 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](http://mu.motorola.com), 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](https://www.youracclaim.com/badges/4c4dcaea-f6b7-450b-a646-8e5d859b6ba2/linked_in) 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](https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=2263&context=etd) (page 45 ref #1) [INOAEP](http://www.inaoep.mx/~jgob/hjg/2007/Primera/11_14.pdf) (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](https://www.raytheonmissilesanddefense.com/) 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



09/2019 – 01/2022 [Georgia Tech Research Institute (GTRI)](http://www.gtri.gatech.edu) 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](http://www.uasc.com) / [Elbit System](https://elbitsystems.com/) 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](http://www.arris.com/) Lawrenceville, GA

05/2008 – 05/2013 – GOOGLE - Motorola Mobility. - Lawrenceville, GA

***Senior Embedded Software Engineer / Senior QA Engineer***

[Paceomatic](http://www.paceomatic.com). Norcross, GA - ***Software Design Engineer***

[American Megatrends Inc](http://www.ami.com). Norcross, GA - ***Software/BIOS engineer***

[USF](http://www.usf.edu), Center for Microelectronics Research. Tampa, FL. ***Research Assistant*** *(Laser Lab, Defect Eng. lab)*

[USF](http://www.usf.edu), [Electrical Engineering Dept](https://www.usf.edu/engineering/ee/). Tampa, FL. - ***Controls Laboratory Teaching Assistant***

[Souriau corporation](http://www.souriau.com/) , 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**

* 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**

* + *"****Non-destructive eval. of CMP pads using scanning ultrasonic technique****"*, 198th ECS, Phoenix, 2000
  + *“****Integrating instructional technology methodologies in a state-of-the-art industrial control laboratory****”*. Publication for Remote teaching tech. Symposium, USF, March 24, 2000. [IESTEC](https://www.researchgate.net/profile/Franklyn_Diaz/publications) (ref. #13) [ACM](http://dl.acm.org/citation.cfm?id=1254261)
  + *“****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.