DANIEL SIMON JR.

Teacher | Encourager | Engineer

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Short Bio

Daniel Simon Jr. is a systems engineer, Army veteran, and lifelong learner with over 25 years in defense avionics, semiconductor testing, and robotics. He builds Test Program Sets for fighter aircraft programs at Lockheed Martin. Outside of work, Daniel mentors young people in STEM, mathematics, and engineering. He believes every individual has the power to change the world.

Standard Bio

Daniel Simon Jr. is a systems engineer at Lockheed Martin Corporation, where he builds Test Program Set solutions for defense avionics programs including the F-16 and F-35. An Army veteran (Specialist E4) and naturalized U.S. citizen originally from Haiti, Daniel enlisted in the United States Army in 1997 and served at Fort Hood, Texas. He speaks English, Haitian Creole, and Spanish.

After the military, he pursued engineering through years of continuous education: an Associate of Applied Science in Electronic Engineering Technology from ITT Technical Institute, an Associate of Science in Mathematics from Richland College, and a Bachelor of Science in Electrical Engineering from UT Dallas in 2012. His senior design project, an RF-based friendly-fire prevention system, earned 3rd Place for Best Project.

Over 25 years, Daniel has worked at National Instruments, Asyst Technologies, Texas Instruments, Raytheon, and BAE Systems, moving from electronics technician to senior systems engineer. He holds an active DoD Secret clearance and certifications in NI TestStand, LabVIEW, LabWindows/CVI, and Altium Designer.

Engineering isn't all of it. Since 2012, Daniel has tutored and mentored young people in STEM, math, and life skills, driven by a desire to be the mentor he needed at age 14. He's a champion of Literacy Achieves, close to his heart because his own parents struggled to master English after immigrating from Haiti in 1988. He aspires to be the first in his family to earn a Ph.D.

Two quotes guide his work: “Knowledge is Power” (Francis Bacon) and “Everything was invented by individuals no smarter than you” (Steve Jobs). He shares these with every student he mentors.

Full Bio

Daniel Simon Jr. is a systems engineer, Army veteran, mentor, and lifelong learner. His story starts in Haiti and runs through Brooklyn, the U.S. Army, and 25 years of building and testing some of the most complex systems in American defense.

Born in Haiti, Daniel came to the United States with his parents in 1988. They settled in Brooklyn, New York. His parents, adult immigrants with limited English, worked hard to give their only child a way out of inner-city poverty. Daniel went to Samuel J. Tilden High School, graduating in 1991, then studied Graphic Design at the City College of New York. Art was his first love. He drew constantly and dreamed of becoming an illustrator. But a different path called. On August 6, 1997, he enlisted in the United States Army.

At Fort Hood, Texas, Daniel served as a Utilities Equipment Repairer (Specialist E4), diagnosing malfunctions in HVAC and electrical systems, maintaining generators, and supervising entry-level technicians. He managed a tools inventory worth $50,000, earned his Universal CFC/HCFC License, and completed the Utilities Equipment Repairer Course at Aberdeen Proving Ground, MD. His proficiency earned him the Army Commendation Medal

(ARCOM). But the real gift of the Army was something else: training reignited a childhood love for engineering and electronics, a love that started in his father's workshop, surrounded by tools and the satisfaction of building things. He left with an honorable discharge in May 2000 and continued serving in the Texas Army National Guard as an Electronics Technician, troubleshooting RF, Microwave, and Satellite communication systems down to the component level.

Then came the hard part: getting an education while working full-time. Daniel earned an Associate of Applied Science in Electronic Engineering Technology from ITT Technical Institute, then enrolled at Austin Community College toward an Electrical Engineering degree. In 2003, he moved to Dallas for a job at Texas Instruments. He went back to school again in 2008, earning an Associate of Science in Mathematics from Richland College, then transferred to UT Dallas. In 2012, he graduated with a Bachelor of Science in Electrical Engineering. His senior design project, an RF-based friendly-fire prevention system, took 3rd Place for Best Project. He became a naturalized U.S. citizen in 2009.

The career that followed reads like a tour of American tech and defense. At Asyst Technologies (2000–2002), Daniel integrated semiconductor wafer processing systems and programmed Staubli 6-axis robots. At National Instruments (2002–2003), he built computer-based instrumentation products. His 12 years at Texas Instruments (2003–2015) saw him rise from technician to interim Test/Product Engineer in Customer Product Engineering, where he built PXI-based test systems from scratch, performed Failure Analysis reporting on customer returns for the Automotive Catalog product line, ran AEC-Q100 and Q1 qualifications, and worked across multiple ATE platforms. At Raytheon (2015–2016), he documented software architecture for Automated Test Sets and completed formal Systems Engineering training. At BAE Systems (2016–2021), he designed Test Program Sets for F-16 and F-35 avionics, going from Engineer II to Senior TPS Engineer.

Today, Daniel is a Senior Test Engineer at Lockheed Martin Corporation. He builds complete Test Program Set solutions for defense avionics: hardware Interface Devices, test software, diagnostic algorithms, and the full technical data package that goes with them. He leads cross-functional teams through formal engineering processes, designs fault isolation workflows that cut mean time to repair, and builds architectures meant to last decades. He holds an active DoD Secret clearance.

He also hasn't stopped learning. Daniel contributes to open-source projects that push him into new territory. His Math MCP Server got a 14.3x speedup through WebAssembly optimization. His PITS-MRAS framework connects physics-informed neural networks with adaptive control theory. And his Universal Physics Tensor Framework implements bridge equations linking quantum, classical, and cosmological physics. These projects reflect something real about him: he's genuinely interested in where philosophy meets science.

A few months after graduating from UT Dallas in 2012, Daniel started volunteering. The motivation was simple and personal: he wanted to be the person he needed when he was 14 years old. He began tutoring students in math and science. STEM became the focus. Then three young men he'd been guiding for several years asked him to champion them and their ideas. That's when tutoring turned into mentoring, covering not just school but life. He's a champion of Literacy Achieves, and the reason is personal: his own mother and older relatives, who immigrated decades ago, still struggle with English. Daniel knows that program could have changed his parents' lives if it had existed back in 1988.

Daniel wants to be the first in his family to earn a Ph.D. He's still chasing knowledge across engineering, philosophy, mathematics, and physics. Two quotes guide everything he does. He shares them with every student: “Knowledge is Power” by Francis Bacon, and “Everything was invented by individuals no smarter than you” by Steve Jobs. That's what he believes. Education and determination can take anyone, from anywhere, and give them the tools to change the world.