

Reginald DeWitt Harris II

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EDUCATION

Cornell University | Sibley School of Mechanical and Aerospace Engineering

Ithaca, NY

Bachelor of Science in **Mechanical Engineering**

GPA: 3.0 | Anticipated Graduation Date: May 2027

- **Relevant Coursework:** Introductory Fluid Mechanics, System Dynamics, Mechanics of Engineering Materials, Electric-Drive Vehicle Engineering, Intro to Mechanical Design, Dynamics, Statics and Mechanics of Solids, Thermodynamics, Differential Equations

Phillips Exeter Academy

Exeter, NH

High School Diploma

GPA: 10.7/11 | Graduation Date: June 2023

PROFESSIONAL EXPERIENCE

GE Aerospace

Bohemia, NY

Manufacturing Engineering Intern

May 2025 - August 2025

- Designed PCB masking templates for 10 LRUs in ~1300 CCAs for next FY, estimating 673.8 labor hours saved toward 5% DLP goal
- Designed and deployed 3 SolidWorks fixtures: an IPC-A-610 compliant resistor bending fixture saving 2.67 hours of assembly time per unit, and two ergonomic workstation fixtures, enhancing operator safety and comfort during maintenance and assembly
- Reduced open non-conformances in the PCB assembly cell from 91 to 60 by tracking 205+ new NCs, analyzing trends, generating daily reports, and driving closure actions
- Led root cause analysis investigations into cracking T1 transformers and Chromerics thermal compound issues, mitigating impacts across 10+ CCAs

PROJECTS

ScrubStep: Automatic Mechanical Shoe Cleaner

Ithaca, NY

Cornell University

February 2025 - May 2025

- Collaborated with a 5-person team to design a fully mechanical automatic shoe cleaner in Fusion 360, achieving functionality within a \$600 budget
- Led 5 iterative design improvements using the Pugh matrix and structured testing, optimizing design trade-offs between durability, manufacturability, and user satisfaction
- Delivered a fully functional prototype meeting all performance and cost requirements, demonstrating results across multiple testing scenarios

The Mechanical Tree: NYLF Engineering Capstone Project

Berkeley, CA

UC Berkeley

June 2022

- Designed and built prototypes of "The Mechanical Tree" in AutoCAD, creating scaled models that illustrated the mechanics, operation, and overall functionality of the machines
- Created technical documentation with detailed drawings, cost estimates, and material specifications, ensuring alignment with budget and project constraints
- Presented final designs to a panel of 5 judges, delivering an elevator pitch that highlighted engineering methods, resource planning, and project outcomes

PC Hardware Consulting Initiative

Doha, Qatar

Self-Managed

September 2017 - May 2019

- Built and optimized 15+ custom PCs by advising clients on hardware selection, cost-performance trade-offs, and system assembly, achieving reliable builds tailored to user needs
- Resolved 25+ hardware and software issues, troubleshooting problems in under 1 hour per case and ensuring maximum uptime and client satisfaction
- Provided technical support and training, increasing client confidence while improving system reliability and maintainability across all builds

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

The Iota Phi Chapter of Kappa Alpha Psi Fraternity, Inc.

Ithaca, NY

Chapter President

November 2024 - Present

- Directed a 7-member executive board overseeing 15+ events, including community service initiatives, fundraisers, and leadership workshops
- Managed a \$5,000+ budget, ensuring fiscal responsibility and 100% compliance with university and national fraternity regulations
- Represented the chapter at 3 regional/national conferences and established working partnerships with 10+ other undergraduate chapters, alumni chapters, and campus organizations to expand outreach and visibility

National Society of Black Engineers (NSBE)

Ithaca, NY

Programming Chair

October 2023 - Present

- Collaborated with 25+ executive board members to organize weekly events to provide support to our community and aid them in their pursuit of higher education
- Developed and automated an Excel sheet system to collect data and track the participation of 130+ chapter members
- Spearheaded a mentorship initiative aimed at providing resources, support, and guidance to 15+ first-year students

Multi-Cultural Greek Fraternal Council (MGFC)

Ithaca, NY

Vice-President of Programming

May 2025 - Present

- Coordinated programming for 15 multicultural Greek organizations, developing initiatives that promoted cultural awareness, collaboration, and student engagement across campus
- Organized and executed 4+ annual events including leadership workshops, service projects, and cultural showcases, drawing 200+ attendees and strengthening inter-organizational collaboration
- Partnered with campus offices and community groups to secure resources, expand outreach, and increase the visibility and impact of council-sponsored programs

SKILLS & AWARDS

Skills: CAD Modeling, Data Analysis, Root Cause Analysis, Process Improvement, Python, MATLAB, Java, Microsoft Excel, TIPQA

Awards: Phillips Exeter Cum Laude Society, The Perry Cup Award, Hinckley-Steedman Award, College Board National African American Recognition Award, Presidential Scholar Program Nominee, MGFC Emerging Leader of the Year