Colin J. Hartigan

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Education

Georgia Institute of Technology, Atlanta, GA *August 2022 – Present*
Bachelor of Science in Computer Engineering, GPA 3.7/4.0; Faculty Honors 1x, Dean's List 3x Expect. Grad. May 2026

- **Concentrations:** Computing Hardware and Emerging Architectures/Embedded Devices
- **Relevant Coursework: [**add as relevant for job]

Experience

Lenovo, Morrisville, NC
World's largest PC vendor ($70B) that designs, manufactures, and sells consumer electronics, software, and business solutions
Associate Quality Engineer, ThinkPad Beta Program *June 2024 – August 2024*

- Managed internal beta testing campaigns of pre-production ThinkPad laptops to identify and resolve product defects in close collaboration with Lenovo product development teams, avoiding $500,000+ in post-launch costs
- Performed failure analysis on nonfunctional ThinkPad hardware, reported findings to development teams, then repaired systems on site, reducing unit downtime and avoiding shipping costs to Asian engineering teams
- Developed batch scripts to expedite system setup and PowerShell scripts to automatically report driver versions of units under test, reducing time to identify root causes and resolve issues

IntelliGenesis LLC, Columbia, MD
160-employee engineering firm providing mission-focused services to improve and advance national security missions worldwide
Software Engineering Intern *June 2023 – August 2023*

- Led intern team to create voice-controlled software implementing real-time facial recognition for security cameras
- Designed and implemented React web component to map and organize a network's internet connections' origins and destinations, providing a value-added feature desired by customers
- Redesigned and refactored several React web components for flagship cybersecurity product's web interface, improving user experience and codebase maintainability

The HIVE Makerspace, Georgia Tech, Atlanta, GA
Nation's largest ECE-centered makerspace providing an accessible engineering workspace and hands on training to students
Peer Instructor & Operations Committee Member *January 2023 – Present*

- Design and implement process changes to improve space's operations, streamlining staff responsibilities and increasing overall space efficiency
- Lead engineering workshops and educate students to operate tools and machinery including 3D printers, laser cutters, electronics workstations, and workshop tools

Johns Hopkins Applied Physics Laboratory (APL), Laurel, MD
Nation's largest university research center supporting U.S. government technology development programs and national priorities
ASPIRE High School Intern, R&D and Space Exploration Sectors *2020 – 2022*

- Developed deep learning model to predict and visualize spread of waterborne illnesses from weather satellite data
- Designed and implemented tooling to visualize result of circuit manufacturing machinery, reducing probability of failed prints and saving several hours of failure analysis; filed APL invention disclosure

Projects

Album Art Frame *June 2024*
ESP32-controlled LED matrix that displays album art for currently playing music on Spotify

- Implemented image processing pipeline in C++ to map album art fetched from Spotify's API onto LED matrix
- Designed frame for display in Autodesk Fusion and fabricated housing with laser-cut steel and wood stock

HIVE Dashboard *July 2023 – December 2023*
Website designed to optimize 3D printing workflows and procedures for staff at The HIVE Makerspace

- Identified shortcomings in processes for queuing, tracking, and completing 3D printing jobs
- Designed and built website that provides real-time print tracking for end-users and centralizes operational tasks for staff, increasing production efficiency and increasing print yield rates
- Implemented database to log print jobs and mass cloud file storage to improve print file storage capabilities