

# Colin J. Hartigan

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## Education

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**Georgia Institute of Technology**, Atlanta, GA

August 2022 - Present

Bachelor of Science in Computer Engineering, GPA 3.6/4.0; Dean's List

Expected Graduation, May 2026

- **Concentrations:** Computing hardware and emerging architectures, embedded devices
- **Relevant Coursework:** Linear Algebra, Discrete Math, Digital System Design, Object-Oriented Programming

## Skills

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**Programming Languages:** Python, JavaScript, HTML/CSS, Java, C, C++, Assembly, Lua

**Technologies:** React.js, Next.js, MongoDB, Google Firebase, Git/GitHub, Docker, Flask, OpenCV, Tensorflow, PyTorch

**Hardware:** Raspberry Pi, Arduino, ESP development boards

**Languages:** English (native), Spanish (conversational)

## Experience

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**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 project to create voice-controlled software implementing real-time facial recognition for security cameras
- Redesigned and upgraded selected React components for flagship cybersecurity product's website, improving user experience and codebase maintainability
- Designed and implemented React component to map and organize a network's internet connections' origins and destinations, providing a value-added feature desired by customers

**The HIVE Makerspace**, Georgia Tech, Atlanta, GA

Nation's largest ECE-centered makerspace providing an accessible engineering workspace and free-to-use resources to students

**Peer Instructor**

January 2023 – Present

- Instruct and assist students in operating tools and machinery, maintain space and equipment
- Operate and maintain 3D printers, laser cutters, electronics workstations, and workshop tools
- Collaborate with peers to improve space's operational procedures, increasing overall efficiency for common tasks

**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, Space Exploration Sector**

October 2021 - May 2022

- Researched and built artificial intelligence systems which utilizes weather satellite data to predict and visualize the spread of water-borne illnesses
- Leveraged multithreaded concurrent programming in Python to increase efficiency of weather data processing

**ASPIRE High School Intern, Research and Exploratory Development Department**

October 2020 - May 2021

- Wrote CNC G-code parsing and visualization software for circuit-producing, additive manufacturing machinery
- Filed an intellectual property disclosure at APL for software created during internship due to originality and utility of software as a debugging tool

## Projects

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**HIVE Dashboard**

July 2023 - Present

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 website which provides real-time print tracking and alerts for end-users, increasing production efficiency and successful print yield rates
- Implemented database to log print jobs and printer maintenance and mass cloud file storage to save print files

**VALORANT Inventory Manager**

2021 - 2023

Application for the video game VALORANT used to manage a user's inventory of cosmetic items

- Identified community's desire for improved customization features and developed full-stack solution
- 300,000+ downloads, 20%+ user retention rate, global userbase (< 10% of users reside in United States)