


Miguel Garcia

Clifton, New Jersey, USA | mag252@njit.edu | (862) 591-8163 |  [linkedin.com/in/miguelangarcia/](https://www.linkedin.com/in/miguelangarcia/)

EDUCATION

New Jersey Institute of Technology

Newark, NJ

Bachelor of Science in Computer Engineering, Minor in Drones and Robotics

September 2022 - December 2026

Relevant Coursework: Computer Science 1 & 2 (C++), Computer Organization and Architecture, Applied Machine Learning, Calculus 3, Differential Equations, Linear Algebra, Discrete Analysis for Computer Engineers, Principles of Operating Systems.

SKILLS

Programming Languages: Python, C/C++, HTML/CSS, JavaScript

Development Tools & Libraries: React, Git, Altium Designer, NI Multisim, JetPack- Linux (Ubuntu), Docker

AI & Machine Learning: Real-time classification, object detection (DetectNet, TorchVision)

EXPERIENCE

Full Stack Software Development Co-op, Verizon - Basking Ridge, NJ

January 2025 - Present

- Engineering a comprehensive voice assistant by designing and implementing a front-end interface using HTML, CSS, JavaScript, and React library, to ensure a seamless and dynamic user experience.
- Developing a multi-level conversational agent system, integrating natural language processing techniques to enhance user interaction and engagement by refining responses with an intent matching layer.
- Continuously adapting project deliverables to align with changing business requirements, and engaging in ongoing research on Product Management methodologies to bridge the gap between technical development and strategic business objectives, ensuring alignment between project goals and broader company initiatives.

Electronic Arts Software Engineering virtual experience program on Forage

March 2025

- Proposed a new feature for the EA Sports College Football and wrote a Feature Proposal describing it to other stakeholders.
- Built a class diagram and created a header file in C++ with class definitions for each object.
- Patched a bugfix and optimized the EA Sports College Football codebase by implementing an improved data structure.

Network Performance Intern, Verizon - Hempstead, NY

June 2024 – August 2024

- Collaborated closely with Verizon Engineers to optimize information and data for Verizon's fiber optic communication systems also known as FIOS, for certain boroughs of New York.
- Worked on the Fiber to the Premises (FTTP) Tracker and Build Driver (which determines the purpose and necessity for a job) projects, which focused on the organization and creation of workflows that resulted in the update of over 750+ addresses in Brooklyn, 600+ addresses in Queens, and 2000+ Builder Drivers for 2024.

Data Systems Intern, HISPA - Remote(Online)

June 2023 – July 2023

- Optimized data entry systems and workflows to enhance the accuracy and efficiency of information management within the organization utilizing advanced data processing tools in Salesforce.
- Organized 10 years of data from Excel sheets, ensuring seamless data migration and accessibility resulting in an updated and streamlined information collection system for over 60 companies, improving data retrieval and analysis capabilities.

PROJECTS

RayTracing Project - C++ | Graphics Programming

April 2025- Present

- Developing a path tracer in C++ to simulate realistic lighting effects, including shadows, reflections, and indirect illumination while leveraging object-oriented programming principles, operator overloading, and vector mathematics to efficiently implement ray-object intersections, shading models, and indirect lighting techniques

PROJECTS...

Autonomous Obstacle Recognition Simulation - Jetson Orin Nano | Python | Pygame December 2024

- Developed a real-time obstacle avoidance system integrating Jetson Nano's classification model with a Pygame based graphical simulation and socket server-client architecture for live data transmission and delivered a functional prototype showcasing real-time interaction between machine learning models and simulation environments.

Shield Board - Altium Designer | Printed Circuit Board design August 2024

- Designed and developed a 2-layer PCB shield board for power distribution, including strategic placement of pin headers, regulators, and LEDs. Applying design rules for trace width, clearance, and polygon routing for power and ground connections, ensuring efficient and effective layout.

Chatbot - Python | Jupyter Notebook | GPT 3.5 December 2023

- Developed an intelligent question-answering system that could effectively utilize large language models (LLMs) like GPT-3.5 for text comprehension and answering questions, and explored the integration of modern LLMs into interactive applications, using APIs

LEADERSHIP

External Vice President Committee Officer (Fall 2024), SHPE September 2023 - December 2024

- Support the External Vice President of SHPE NJIT in developing and maintaining relationships with external sponsors and corporate partners
- Engage companies to secure sponsorships and funding for key SHPE events, including the National Conference, regional meetups, and campus initiatives
- Coordinate outreach to bring professionals and organizations to campus, enhancing professional development opportunities for members.
- Actively participate in and volunteer for on-campus activities, fostering community engagement and support for SHPE.
- Have successfully initiated and coordinated a partnership with Microsoft HOLA to deliver a professional development session for our SHPE chapter, enhancing members' skills in career readiness, networking, and personal branding for SHPE Convention readiness.

NJ Governor's Fellow, Center for Hispanic Policy, Research and Development June 2023 - July 2023

- Lead a group of 8 in finding a way to promote HISPA to a higher audience as a CHPRD NJ Fellow's Project tackling the question on how we can appeal to politicians as our target audience which was a successful presentation and guide which HISPA adopted.
- The 8-week program combined practical, hands-on experience with traditional classroom instruction, leading professionals' guest presentations, and other unique skill-building opportunities.