Bryan Aneyro Hernandez

Houston, Texas, 77038

J 954-297-1787 ➤ Email ☐ LinkedIn ♠ GitHub ♠ Portfolio

Summary

Recent Computer Science graduate with a strong foundation in algorithms, data structures, and backend development. Skilled in building scalable web services, REST APIs, and full-stack applications using Java, Python, Node.js, and MongoDB. Proven ability to work in Agile teams, solve complex problems, and deliver production-grade software.

Actively seeking Software Engineer or Backend Developer roles to contribute to innovative, mission-driven teams.

Education

University of Central Florida

Bachelor of Science in Computer Science

Aug. 2021 – May 2025 Overall Cumulative GPA, 3.476

Relevant Coursework

- Data Structures
- Algorithms Analysis
- Senior Design I and II
- Processes for Object-Oriented Software Development
- OOP Java (here)

- Robot Vision (<u>here</u>)
- Enterprise Computing (here)
- System Software (here)

Projects

PL/0 Compiler | C, Compiler Design | repository

- Collaborated on building a four-module compiler for the PL/0 language targeting a virtual machine.
- Designed and implemented lexical analysis, parsing, and code generation from scratch using C.
- Gained deep understanding of symbol tables, grammar parsing, and runtime environments.

Unearthed Truths | Java Spring Boot, PostgreSQL, Docker | API repository - Website repository

- Created a RESTful API to map archaeological discoveries linked to Biblical history, using Spring Boot and PostgreSQL.
- Implemented role-based authentication with Spring Security and JWT for secure admin access.
- $\bullet \ \ {\rm Deployed \ backend \ using \ Docker \ on \ Render \ to \ demonstrate \ real-world \ containerized \ deployment.}$

Bit by Bryan (Personal Portfolio Website) | Next.js, Tailwind CSS, React, GSAP | repository

- Created a personal portfolio with Next.js and Tailwind CSS to highlight projects and resume; deployed via Vercel.
- Enhanced UX with GSAP and Framer Motion animations and mobile responsiveness.
- Implemented custom carousel for project display and stylized navigation with GooeyNav and BlurText components.

Neural Networks and CNN Training | Python, PyTorch, Jupyter Notebook | repository

- Built and trained deep learning models using PyTorch for image classification tasks on MNIST and CIFAR-10 datasets.
- Built and tested shallow and deep neural nets with various architectures and activations.
- Trained CNNs with varied filter sizes and settings; compared learning rates and epochs.
- Visualized loss and accuracy metrics during training to analyze model behavior and effectiveness.

RE-RASSOR: New Arm (Senior Design) | ROS2, Gazebo, MoveIt2, Python, Ubuntu | repository

- Contributed to the development of a robotic arm with 4 joints for a lunar rover in a year-long senior design project.
- Helped simulate and control robotic motion using Gazebo and MoveIt2, integrating URDF/Xacro robot descriptions.
- Implemented ROS2 nodes in Python and C++ to manage inverse kinematics, joint actuation, and trajectory planning.
- Worked collaboratively within a multidisciplinary team to integrate the arm into a full robotic rover system and validate performance in simulation.

Technical Skills

Languages: Java, Python, C, JavaScript, HTML, CSS

Frameworks / Libraries: Node.js, Express.js, React.js, Next.js, JavaFX, Java Spring, Spring Boot, Bootstrap, Tailwind

CSS, PyTorch

Developer Tools: GitHub, VS Code, Postman, Ubuntu, Jupyter Notebook **Backend / DevOps**: REST APIs, MongoDB, MySQL, JWT Auth, Vercel

Other: Agile, Scrum, Unit Testing

Certificates

- ROS2 For Beginners (Level 1, 2, 3)
- Java Spring Framework 6, Spring Boot 3, Spring AI