

# DAVID CARBAJAL PALACIOS

## CAREER OBJECTIVE

Recent Computer Science graduate with hands-on experience in software development, data analysis, and ML/AI projects. Focused on building efficient, scalable applications and leveraging data-driven solutions to solve real-world problems. Skilled in Python, C++, and various other programming languages, with experience in full-stack web development, RESTful APIs, and data modeling. Eager to learn new skills and technologies as needed, and contribute to innovative solutions in a dynamic, forward-thinking team.

## CORE SKILLS AND COMPETENCIES

<b>Programming Languages:</b>	Python, HTML, CSS, C++, C, Java JavaScript, TypeScript, SQL, R
<b>Frameworks and Libraries:</b>	ASP.NET, Node.js, Angular, React
<b>Databases:</b>	MySQL, PostgreSQL, Oracle
<b>Tools and Technologies:</b>	RESTful APIs, Git, Docker, AWS, Wolfram SystemModeler and Mathematica
<b>Software Development:</b>	Agile Methodologies, Software Engineering, UI/UX, Data Structures

## EDUCATION AND CERTIFICATION

- Master of Science in Computer Science | Florida Polytechnic University – Lakeland, FL | GPA: 3.36/4.0 Dec 2024
- Bachelor of Science in Computer Science | Florida Polytechnic University – Lakeland, FL | GPA: 2.99/4.0 Dec 2023
- Bachelor of Science in Computer Science (Transferred) | Rochester Institute of Technology – Rochester, NY Dec 2019
- Intro to Deep Learning and Python Certification | Kaggle Jun, Jul 2023

## AWARDS AND ACHIEVEMENTS

- Highest Awarded Scholarship | Florida Polytechnic University (M.S. Program) 2024
- 1<sup>st</sup> Place – Best Research Poster Award | Blue Integrated Partnerships, Internship 2024
- Provost's List | Florida Polytechnic University Spring 2020

## PROFESSIONAL EXPERIENCE

### *Research Intern | Blue Integrated Partnerships (Purdue University) – UPR Bayamon, PR Jun 2024 – Jul 2024*

- Developed a diagram in Wolfram SystemModeler inspired by the carbon cycle to analyze carbon flow and storage patterns
- Compared and analyzed graph data from SystemModeler with real climate data sources such as the Carbon Storage Atlas
- Collaborated with a cross-functional team of 5 researchers, synthesizing data from multiple climate sources to optimize model performance
- Presented findings to internship fellows and professors, contributing to the refinement of climate prediction models

### *Research Intern | Blue Integrated Partnerships (Purdue University) – West Lafayette, IN Jun 2022 – Aug 2022*

- Developed and optimized an impact assessment algorithm to evaluate concussion severity
- Conducted quantitative analysis of head impact data, improving concussion detection techniques for sports injuries and automotive safety applications
- Delivered a technical report and research presentation on model findings, which contributed to ongoing concussion risk research at Purdue University

## ACADEMIC PROJECTS

### *[Mobile Game Development](#) | Android Studio, Java, Audio Processing, UI/UX Aug 2023 – Dec 2023*

- Developed an interactive mobile game in Android Studio, integrating Python-based audio processing for seamless sound transitions
- Ensured each interface contained the appropriate soundtrack to enhance user experience and immersion

### *[Map the World's Printers](#) | HTML, CSS, JavaScript, MySQL, AWS Aug 2022 – Apr 2023*

- Collaborated on development of web application for QR code-based remote printing with customizable settings.
- Assisted in designing and implementing the frontend using HTML, CSS, and JavaScript, ensuring an intuitive user experience for configuring and managing printers
- Contributed to backend tasks, transforming HTML interface files into Handlebars templates to dynamically render and display user and printer information.

### *[Python Website Generator](#) | Python, HTML, Web Development Nov 2018 – Dec 2018*

- Engineered a dynamic website builder in Python, allowing users to create customized web pages using a wizard-based UI
- Enabled multiple layouts and themes, allowing users to select and apply different design templates for their websites.