Beatriz Navas Aguilera

Orlando, FL |+1.954-412-9229|beanavasaguilera@gmail.com | https://www.linkedin.com/in/bea-navas/

EDUCATION

University of Central Florida **Orlando, FL**

Bachelor of Science in Computer Engineering

Cumulative GPA: 3.56/4.00 Expected Graduation: December 2026

Relevant Courses:

Computer Science 1 (C), Object Oriented Programming (Java), Linear Circuits 1 & 2, Electronics 1, Digital Systems, Computer Organization

SKILLS

Technical Skills: C, C++, Java, CSS, MySQL, MATLAB, AutoCAD, Arduino, Verilog, LTspice, TypeScript, Node.js, React.js, Docker

Certifications: Foundations: Data, Data Everywhere (Google), Generate Insights to Make Data-Driven Recommendations (Meta), Interpret Statistical Output (Meta), Microsoft Excel, Word, PowerPoint

WORK EXPERIENCE

Biznaga Media **Weston, FL**

Software Engineer and Data Analyst Intern *May 2023 – Sep 2023*

- Played a key role in the creation of the company's website by developing and implementing front-end and back-end components.
- Utilized tools such as **GitHub** for version control, **CSS** for styling, and **TypeScript** for robust, type-safe code. These efforts resulted in the successful delivery of efficient web application projects for an advertising company.
- Collaborated on data trend analysis projects, leveraging statistical tools like **SQL**, database design and methodologies to identify key patterns and insights and developed data automation processes.

Technical Content Intern *June 2022 – Feb 2023*

- Increased user engagement by 30% by producing, repurposing, and optimizing technical content across various platforms for an advertising company with technology sector clients, ensuring brand consistency and relevance
- Boosted campaign conversion rates by 20% by creating original, visually impactful advertisements under tight deadlines, aligning with brand guidelines and objectives.

STEM Tutor *Apr 2020 – Jun 2021*

- Provided personalized academic support and guidance to over 50 STEM students by creating lessons to suit their unique learning styles and academic requirements under tight deadlines, such as worksheets, resulting in a 20% average improvement in their grades.

PROJECTS

Motor-powered Airplane | SolidWorks, AutoCAD, CFD Software, LTspice, LabVIEW

- Collaborated with a multidisciplinary team of 5 to design and refine an innovative motor-powered airplane, utilizing **AutoCAD** for precise drafting, **LabVIEW** and **SolidWorks** for **3D modeling**, resulting in a 20% decrease in design errors.
- Applied **CFD Software** for hydrodynamic optimization, enhancing the plane's performance and leading to a 12% decrease in drag.
- Led electrical engineering team, implementing advanced circuit techniques and simulated with **LTspice**.

Campus Parking Program | C, File I/O, GitHub, Dynamic Memory Allocation

- Developed a **C** program to efficiently manage campus parking logistics, processing and analyzing hundreds of data entries using **DMA**.
- Implemented test-driven development methodologies with **File I/O** along with data structures, debugging and algorithms to ensure reliability and robustness, resulting in a 25% improvement in project reliability and a 30% reduction in bug occurrences.
- The program successfully optimized data handling and storage, enhancing overall efficiency and accuracy in managing parking logistics.

Great Navel Orange Race | 3D Printing, Aerodynamic Simulation Software, LTspice

- Collaborated with a team of students to engineer a high-speed, motor-powered boat utilizing **3D printing** technology.
- Integrated the motor system, optimizing the propulsion system by employing **aerodynamic simulation software**.
- Achieved a 15% increase in fuel efficiency and enhanced overall system reliability through effective integration using **LTspice**.

Payload Competition | LTspice, Simulink, MATLAB

- Led the electrical team in the development of the proposal to advance the understanding of strain in cargo during rocket launches.
- Designed and simulated electrical systems using **LTspice**, **Simulink**, and **MATLAB**, ensuring robust data acquisition.

KnightHacks StayDrippy | TypeScript, CSS, Java, OpenAI API

- Collaborated with fellow UCF students at the 2024 KnightHacks event to boost gamers' success in the popular DTI Roblox game.
- Led the development and design of a website using **TypeScript**, **CSS**, and **Java**, ensuring a responsive user interface design.
- Integrated and optimized an Artificial Intelligence framework using an **OpenAI API**, resulting in a 30% increase in DTI Roblox wins.

LEADERSHIP DEVELOPMENT & UNIVERSITY INVOLVEMENT

SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS (SHPE) – UCF Chapter **Orlando, FL**

Board Member, Tech Committee, Projects Committee *Oct 2022–Present*

- Contributed to strategic direction and organizational success by participating in decision-making processes and collaborating with fellow board members to shape SHPE UCF's mission, leading to a 20% increase in membership.
- Enhanced the technology sector of SHPE by utilizing strong communication and leadership skills, as well as extensive technical knowledge, implementing 3 new tech initiatives and projects- such as a discord Chatbot that improved organizational efficiency by 15%.
- Supported team and individual projects by combining computer science and computer engineering skills, successfully completing 5 major projects that enhanced team collaboration and members' technical skills.