Gisela Benavides Canas

St. George, UT | (385) 881-7124 | giselambenavides@gmail.com
giselabenavides.com | linkedin.com/in/giselabenavides

Education

2022 – 2026 **Utah Tech University**, St. George, UT, United States

B.S. in Software Engineering, Expected May 2026

GPA: 3.5 / 4.0

Relevant Coursework: Machine Learning, Artificial Intelligence, Internet of Things Programming, Web Applications, Advanced Algorithms, Statistics with Programming

Research Experience

2025 – Present **AeroSense**, *Research Assistant*, Utah Tech University.
Department of Electrical and Computer Engineering. Advisors: *Dr. Bing Jiang*, *Dr. Milan Pantovic*. Contributing to interdisciplinary research involving sensing systems and data-driven analysis. Developing software components and analytical workflows for experimental and sensor data. Collaborating with faculty and student researchers on system design, testing, and validation. Preparing research outputs for poster presentations and conference submissions.

2025 – 2025 **Herpetofauna Conservation**, *Research Assistant*, Utah Tech University.
Department of Biology. Advisors: *Dr. Ren Quinn*, *Dr. Megen Kepas*. Conducted computational and data-driven analysis in support of ecological conservation research. Assisted in collection, cleaning, and interpretation of biological field data. Collaborated across disciplines to integrate software tools into biological research workflows. Produced research outcomes resulting in poster presentations and abstract submissions.

Professional Experience

2024 – Present **Web Designer**, *Utah Tech University*, St. George, UT.
Maintained and deployed content across 100+ digital signage displays campus-wide. Designed, developed, and maintained university websites using HTML, CSS, JavaScript, PHP, and WordPress. Collaborated with campus committees and departments to ensure alignment with institutional branding and strategic goals. Led UI/UX design initiatives through wireframes, user flows, and accessibility-focused design improvements.

Posters

Nov 2025 **Gisela M. Benavides Canas**, Bing Jiang, Milan Pantovic. AeroSense. Poster presented at SPARK Fall Forum, Utah Tech University.

Feb 2026 **Gisela M. Benavides Canas**, Bing Jiang, Milan Pantovic. Mobile App for Real-Time Physiological Monitoring in Athletes. Abstract accepted for poster presentation at Utah Conference on Undergraduate Research (UCUR). (Scheduled)

Apr 2026 **Gisela M. Benavides Canas**, Bing Jiang, Milan Pantovic. Mobile App for Real-Time Physiological Monitoring in Athletes. Abstract submitted for consideration at Rocky Mountain Bioengineering Symposium. (Submitted)

Selected Projects

Fall 2026 **JobHunterAI**: Designed an LLM-powered automation system to streamline job application workflows. Implemented tool-calling agents to orchestrate resume generation, tracking, and document management. Integrated browser automation and cloud APIs to manage job metadata and resume outputs. *Technologies: SmolAgents, LLM Tool Calling, Chrome DevTools MCP, Google Sheets API, Google Drive API, Pandoc*

Fall 2026 **Metabolic Time-Series Dashboard**: Built an interactive dashboard for physiological and environmental time-series data. Processed VO Master data including heart rate, VO_2, and atmospheric variables. Developed dynamic, interactive visualizations. *Technologies: JavaScript, D3.js*

Spring 2025 **Butterfly Image Classifier**: Trained a convolutional neural network for multi-class butterfly species classification. Dataset: 12,594 training images, 500 validation images, 500 test images. Achieved 0.94 training accuracy and 0.92 test accuracy. *Model: MobileNetV2. Technologies: Python, TensorFlow, Pandas, Matplotlib*

Fall 2024 **Sentiment Analysis**: Analyzed sentiment trends in Elon Musk's tweets using natural language processing techniques. Visualized temporal sentiment patterns. *Technologies: Python, Pandas, Matplotlib, vaderSentiment, X API*

Fall 2024 **IoT Wearable and iOS App for Tracking Basal Body Temperature**: Designed a cost-effective IoT wearable paired with an iOS application for menstrual cycle tracking. Implemented Bluetooth Low Energy communication between hardware sensors and mobile app. *Technologies: Swift, Bluetooth Low Energy (BLE), Adafruit MLX90614 Library, PulseSensor Playground*

Scholarships & Honors

2024 – 2025 Computing and Information Technology (CIT) Atkins Scholarship

2023 – 2025 IPA Engineering & Science Scholarship

2024 Dean's List, Spring and Fall semesters

2023 Struggling Students Scholarship