Benzon Carlitos Salazar

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EDUCATION

University of Wisc. - Whitewater
MS in Computer Science
December 2025 | Whitewater, WI
GPA: 3.89 / 4.0

BS in Computer Science
December 2020 | Whitewater, WI
GPA: 3.76 / 4.0

COURSEWORK

GRADUATE

Advanced Algorithm Design and Analysis
Cloud Computing
Optimization Techniques
Software Testing
Big Data and Data Mining
Advanced Software Engineering
Machine Learning

UNDERGRADUATE

Data Structures
Database and Web Design
Software Engineering
Cryptography and Network Security
Computer Organization
Database Management Systems

SKILLS

PROGRAMMING

Python • SQL • R
Java • C • JavaScript

MISCELLANEOUS TECH.

Linux • Git • Docker
REDCap • Tableau • Alteryx

CERTIFICATIONS

Epic: { Cogito • Clarity Data Model • Caboodle Data Model • Clinical Data Model • Access Data Model • Cosmos Data Model }

EXPERIENCE

EMORY UNIVERSITY | *Informatics Analyst II*
May 2024 - Present | Atlanta, GA (REMOTE)

- Lead end-to-end data engineering and analysis efforts across Emory and Grady's OB-GYN and internal Department of Medicine departments, as well as national-scale data from Epic Cosmos, collaborating with cross-functional teams including clinicians, researchers, and project managers to deliver data-driven insights for research and operational decision-making.
- Extract, clean, and transform clinical data from Epic (Clarity, Caboodle), Cerner, and internal data warehouses using SQL, Python, and R to support IRB-approved studies, quality improvement initiatives, and regulatory reporting.
- Pilot and implement proof-of-concept pipelines integrating biomedical informatics standards, ensuring reproducibility, interoperability, and alignment with HIPAA, Emory IRB, and institutional data governance policies.
- Managing large-scale EHR-derived datasets across disparate systems, improving data quality and reliability; develop automated reporting tools and dashboards that accelerated research timelines and enhanced clinical decision-making across departments.

VIVENT HEALTH | *Health Informatics Data Analyst*
Dec 2022 - May 2024 | Milwaukee, WI

- Compiled, integrated, and maintained large-scale clinical and operational datasets from Epic Systems and Provide Enterprise using SQL, Python, and internal ETL pipelines, enabling streamlined access to reliable, high-quality data for strategic decision-making.
- Built interactive dashboards and visualizations in Tableau to communicate performance trends and operational insights to clinical, administrative, and executive stakeholders, improving transparency and facilitating data-driven decision-making.
- Developed and deployed machine learning models using Python and Tableau to support clinical decision-making and optimize resource utilization, helping to resolve critical operational bottlenecks and improve healthcare delivery.

ADVOCATE AURORA RESEARCH INSTITUTE | *Research Programmer Analyst*
Jan 2021 - Dec 2022 | Milwaukee, WI

- Designed and maintained core applications and pipelines supporting collaborative clinical and outcomes research, contributing to the development of a Virtual Data Warehouse written in Java to streamline data access and integration across institutional sources.
- Built and deployed automated ETL workflows using Java and R to extract, clean, and transform clinical and administrative data across both on-premises and cloud environments, significantly reducing data preparation time for analysts and investigators.
- Improved data quality and reproducibility by implementing scalable features and scripting solutions (SQL, R, Python) that generated analysis-ready datasets aligned with HIPAA, IRB, and institutional governance protocols.

PROJECTS

Intelligent Drone Swarm | *Python, C, CrazyFlie, cflib, ESP32, ESP-IDF*
April 2024 - Present

- Design a hierarchical drone swarm system using ESP32 (ESP-IDF, MicroPython) and Bitcraze Crazyflie drones, with a mothership drone processing telemetry and sensor data to coordinate child drones in collaborative missions.
- Develop real-time communication and manual flight control using UDP, CRTP, and PyGame, with PID-based stabilization and dynamic thrust tuning for hover and directional control.
- Build swarm coordination logic for formation flying, synchronized mapping, and autonomous search-and-rescue operations, enabling adaptive multi-agent behaviors across heterogeneous drone platforms.