

# John Paul Feliciano

johnpaulfeliciano98@gmail.com | (951) 315-6763 | linkedin.com/in/johnp-feliciano | johnpaulfeliciano98.github.io

## EDUCATION

### Oregon State University

Mar 2025

#### Bachelor of Science in Computer Science, GPA: 3.39

- Relevant Coursework: Software Engineering I, Software Engineering II, Analysis of Algorithms, Data Structures, Programming Language Fundamentals, Introduction to Databases, Operating Systems I, Web Development, Introduction to Computer Networks, Computer Arch & Assembly Language

## WORK EXPERIENCE

### Inland Empire Health Plan (IEHP), Rancho Cucamonga, CA

Jun 2024 – Dec 2024

#### Software Engineer Intern

- Automated doctor license verification by developing a Python script to interface with the NPPES API and extract names for 100,000+ records, eliminating manual entry and boosting data accuracy
- Developed a Python risk assessment tool that preprocesses cash disbursement data using DBSCAN to identify anomalous invoice descriptions, streamlining high-risk transaction detection and supporting efficient audit workflows
- Consolidated transportation data by identifying key databases, designing an ERD, and documenting access protocols, laying the groundwork for advanced machine learning fraud detection initiatives
- Analyzed procurement contracts with Excel pivot tables to evaluate KPIs—delivery speed, renewal potential, and single-sourcing—and delivered a report that pinpointed control gaps and guided strategic decisions

## PROJECTS

### Levrum Data Technologies

Jan 2025 – Mar 2025

#### Predicting Emergency Medical Service (EMS) Calls in Real-Time

- Built a full-stack application integrating a Django API with a React TypeScript front end and Mapbox heat maps, providing EMS teams with interactive, real-time call predictions for improved decision-making
- Developed a real-time EMS call forecasting pipeline using XGBoost by engineering temporal and spatial features from Charlotte EMS call data, enabling proactive resource allocation for EMS teams
- Optimized geospatial data processing by implementing K-means clustering for EMS call data partitioning, enhancing model granularity and improving regional prediction accuracy
- Orchestrated quality assurance efforts by reviewing code, managing agile sprints, and coordinating team meetings, ensuring a consistent codebase and timely project delivery

### Riverside University Health System Medical Center

Aug 2024 – Dec 2024

#### ICU Insulin Infusion Calculator

- Developed a Flask web tool using HTML/Jinja templates to automate real-time insulin dosage recommendations from blood glucose inputs, cutting manual lookup time
- Partnered with an ICU nurse to analyze a paper-based insulin infusion table, then translated complex, rule-based dosing logic into structured Python conditions within a lightweight Flask app, standardizing critical care protocols
- Implemented unit tests and modular rule setups to handle edge cases and enable swift policy updates, boosting accuracy and reducing dosing errors

## SKILLS

**Development & Integration:** Python, Django, Flask, React, TypeScript, HTML, CSS, Jinja, SQL, Git, RabbitMQ, Pika, Requests, Vite, Unit Testing, ESLint

**Data, Analytics & Networking:** XGBoost, Pandas, NumPy, K-Means Clustering, Data Cleaning, CSV Processing, GeoJSON, Mapbox, Raw Sockets, ICMP, Ping, Traceroute, Network Programming