

# ERIK SWANSON

## Full-Stack Software Developer

✉ erikswanson97@gmail.com

☎ (631) 304-3908

📍 Centereach, New York

🐙 Github

🌐 LinkedIn

## EDUCATION

### B.S. in Computer Programming and Information Systems, Farmingdale State College

09/2020 – 05/2023 | Farmingdale, New York

GPA 3.8 / 4.0

## SKILLS

### Client-Side

HTML, CSS, JavaScript, TypeScript

React, Next.js, Vue

Bootstrap, Material UI

AJAX, jQuery

### Server-side

MySQL, MongoDB, Firebase

Python (Pandas, NumPy, SciPy, Scikit-learn)

Node.js, PHP, HTTP/2

### Development & Operations

Git, GitHub, GitHub Actions

Docker, Postman

Apache, Cloudflare

Agile / Scrum

## STRENGTHS

### End-to-End Development Expertise

Designed, built, and deployed full-stack applications using React, Next.js, Node.js, and MySQL/MongoDB.

### Problem Solving

Skilled in identifying and resolving complex bugs across frontend and backend, improving performance and reliability.

### Scalability & Performance Optimization

Experienced in optimizing database queries.

## SUMMARY

Full-Stack Developer with 5+ years of experience building data-driven web applications, designing and managing relational databases. Strong background in SQL, backend systems, reporting workflows, and scalable application design within production environments.

## EXPERIENCE

### Lead Software Engineer and Project Technologist, Kelm Inc.

05/2023 – Present | Farmingdale, New York

Kelm Inc. is a organization that has 3 major division: Kelm Academy, Kelm Media and Kelm Research. Each specializes in different areas.

- Led a cross-functional team of 8+ developers across frontend, backend, and database systems.
- Designed and maintained PHP-based applications backed by MySQL, writing complex SQL queries for reporting, analytics, and transactional workflows.
- Built real-time interactive features using AJAX with MySQL-backed data synchronization.
- Developed responsive frontend interfaces using Bootstrap.
- Integrated third-party APIs (Stripe, PDF.co [↗](#)) to support payments, document generation, and internal management tools.

## PROJECTS

### Waylaytics, Data-Driven Location Analytics Platform [↗](#)

07/2025 – Present

- Built a full-stack web platform to help users evaluate and compare U.S. states and locations using data on taxes, education, housing, healthcare, crime, and demographics.
- Developed a modern frontend using **Next.js (App Router)** and **React**, featuring interactive **D3.js** data visualizations and dynamic location pages.
- Designed a scalable **MongoDB** data model and implemented custom **Python ETL pipelines** to ingest, clean, and normalize U.S. Census and public datasets.
- Deployed the application on **Vercel**, emphasizing modular architecture, performance optimization, and long-term extensibility for future feature expansion.

### OrganicFinds, PHP Based Website [↗](#)

02/2023 – 05/2023

- Led a team of 4 developers to design the application
- Allowed the users to filter through a list of 100s of recipes using a sorting algorithm.
- Allowed users to save their favorite recipes for later