

ABOUT ME

Passionate software developer with a strong programming foundation. Eager to bring my ideas to life through code, and push the boundaries of technical design.

PORTFOLIO!

danetroiadev.com

SKILLS

- Software Development
- Machine Learning & AI
- Version Control Systems
- Multiple Programming Languages
- Data Structures & Algorithms
- Object-Oriented Programming
- SOLID Principles, Agile Development
- iOS Development
- Problem-Solving
- Adaptability
- Teamwork, Communication
- Attention to Detail



FEATURED PROJECTS

LUCA - Nursing Education & Assessment App

Fall 2025 - Spring 2026 / Group Project

- Built a full-stack Progressive Web App for new nurses using React and a FastAPI backend with Supabase database integration. The app features a guided multi-step patient assessment flow that collects patient data to generate AI-powered clinical recommendations. Recommendations are produced by a custom weighted KNN retrieval model trained on verified clinical cases, encoding patient vitals and symptoms into a feature vector with clinically prioritized weights. This resulted in 100% accurate outputs with no hallucination risk for the medical context. This was completed as a senior design capstone project at the University of Nebraska-Lincoln.

Golf Team Web App

Summer 2025 / Solo Project

- Developed a full-stack web app for a local golf team using ASP.NET Core MVC with SQL database integration. Features role-based access systems, event scheduling and score tracking, and partner-athlete coordination. An identity system exists to consistently track active users and manage their accessible data. This structure allows the controllers to enforce the designated role-based permissions.

Cab Ride Price Predictor

Spring 2025 / Partner Project

- Created various machine learning models in Python to predict cab ride prices, comparing Simple Linear Regression and K-Nearest Neighbors approaches. We analyzed key metrics (MAE, MSE, RMSE, R Squared) across multiple trials using an 80-20 train-test split, showing that the KNN regression significantly outperformed other models with a 4x improvement in R Squared score (0.496). This was submitted as a project for CSCE478 Machine Learning at the University of Nebraska-Lincoln.

Unity Multiplayer Framework

Summer 2025 / Solo Project

- Developed a comprehensive multiplayer game framework within Unity, featuring real-time player synchronization, server authoritative gameplay, and player-to-player interactions. The system includes a networked character controller, modular RPC system, seamless join/leave functionality, and an inventory/interaction system. Programmed in C#, this project shows a practical understanding of real-world development techniques.

RELEVANT EXPERIENCE

Software Developer Intern / Assurity

September 2025 - *Present*

- Develop dynamic web applications using C#, Vue, JavaScript and SQL
- Debug and optimize existing applications to improve UX and reliability
- Collaborate with an Agile team using Jira for sprint planning and issue tracking
- Utilize source control to manage code versions and conduct code reviews

Software Developer Lead / University of Nebraska-Lincoln

August 2025 - *Present*

- Led a small team in designing and building a web application as part of a senior design project
- Defined technical architecture, development priorities, and sprint goals to deliver high-value features
- Implemented modular and responsive application features using React and Javascript

Law Clerk / Dornan Law Team

May 2021 - *Present*

- Create more efficient case management and readiness for trials
- Develop a reputation for reliability and professionalism
- Frequently entrusted with sensitive information regarding cases

EDUCATION

University of Nebraska at Lincoln

Graduating May 2026

- Bachelor's in Computer Science
- Focus in AI & Machine Learning
- Minor in Spanish

Elkhorn North High School / Omaha, NE

Graduated May 2022

- 4-year Honor Roll
- National Honors Society
- 4.0+ GPA

REFERENCES

Ruth Trimble

Manager

402-884-7044

ruth@dltlawyers.com

Jon McElyea

Software Engineer (Mentor)

915-383-0165

jonmcelyea@gmail.com

Deana Klein

Attorney

402-884-7044

deana@dltlawyers.com