Jonathan Kwan

Full-Stack Software Engineer

📍 Fairfax, VA   📞 (703) 431-0676   ✉️ jkwan14@gmail.com   in **LinkedIn**   🐙 **GitHub**   🌐 **Portfolio Website**

TECHNICAL SKILLS

Programming Languages & Technologies | Python, JavaScript, SQL, HTML, CSS
Frameworks & Tools | React, FastAPI, SQLAlchemy, Pydantic, Vite, Docker (with Docker Compose), Git, Render
Databases & APIs | PostgreSQL, OpenAI API, REST
AI/ML Exploration | Google AI Essentials, OpenAI API

Scan QR code for professional contact details

RELEVANT PROJECTS

WasteNot | Full Stack Engineer   Jun '25
https://www.wastenotkitchen.com
https://github.com/kimmiwong/wastenot | FastAPI, SQLAlchemy,
PostgreSQL, Docker, Docker Compose, Spoonacular API, Google Maps API,
React, Vite, React Router, Context API, Git, Render

This app helps users track food items by expiration date, generate recipes based on selected ingredients, and reduce waste through smart composting and meal planning.

- **Collaborated** on a full-stack food waste tracker used to **manage 50+ pantry items** and **reduce food waste** through recipe suggestions
- Integrated the **Spoonacular API** to generate up to 10 dynamic recipes based on selected food items
- Implemented a favoriting system supporting persistent storage of 25+ recipes using **React Context**
- Deployed full-stack app to **Render** with 2 services (React frontend, FastAPI backend) and 5+ environment variables **configured for production**
- Managed 5+ environment variables and API keys using **python-dotenv** and **.env** files across local and deployment environments

Expense Tracker Lite | Full Stack Engineer   May '25
https://github.com/jkwan14/expense-tracker-lite | FastAPI, SQLAlchemy,
PostgreSQL, Docker, Docker Compose, OpenAI API, React, React Router, CSS

This app helps users track and categorize daily expenses using AI to automatically classify transactions for smarter budgeting.

- **Engineered AI-powered categorization** for 100+ user entries using GPT-3.5 and **NLP** with Named Entity Recognition to boost accuracy
- **Devised** custom prompt logic with fallbacks to handle diverse inputs, ensuring reliable performance across **100+ categorization scenarios**
- **Developed** 3+ RESTful API endpoints for transactions and categories, supporting creation, deletion, filtering, and category retrieval
- Constructed a **modular backend** using 2 **SQLAlchemy models** and Pydantic schemas for clean data validation across the API layer
- **Secured API keys** and database configs using environment variables and **python-dotenv**, minimizing risk of credential exposure

PROFESSIONAL EXPERIENCE

CHRISTINE M. REARDON-DAVIS, DMD | Website Administrator   Feb '24 - Feb '25

- Redesigned and maintained **mobile-friendly website**, improving UX and **increasing** online appointment requests
- Created **secure online forms** for patient intake and feedback, **improving HIPAA compliance** and reducing the need for paper-based processing
- **Cooperated** with the dental team to update bios, FAQs, and services, ensuring accuracy and supporting **20+ monthly online inquiries**

CHRISTINE M. REARDON-DAVIS, DMD | Lead Assistant   Apr '04 - Feb '24

- **Supervised and trained** a team of **4+ assistants**, ensuring proper sterilization, pediatric techniques, and efficient **daily workflows**
- **Guided** children with **anxiety or special needs** using tailored strategies, resulting in fewer behavioral disruptions and more **efficient procedures**
- **Coordinated** front desk and dental team to manage patient flow, **minimizing delays** and helping maintain a calm, child-friendly environment

Generations Mental Health | Office Manager   Aug '12 - Aug '23

- Improved operations by implementing an **EHR system**, improving scheduling, billing, and documentation for **30+ daily patients**
- **Managed billing**, **insurance claims**, and follow-ups for **100+ patients**, ensuring accuracy and consistent revenue
- **Handled 20+ daily patient inquiries** with empathy and discretion as the primary contact in a confidential mental health setting

EDUCATION

Hack Reactor | Full Stack Software Engineering Certificate - Software   Jun '25
Engineering Immersive Program

- Full-Stack Web Development (JavaScript, React)
- Backend Engineering (SQL, PostgreSQL, RESTful APIs, FastAPI)
- Frontend Design & UX (HTML/CSS, DOM manipulation, state management)
- Built a full-stack budgeting app with OpenAI integration for auto-categorization of expenses

George Mason University | Bachelor of Science - Psychology   Jan '11

- Cognitive Psychology (applied understanding of human behavior and decision-making)
- Research Methods & Statistics (hypothesis testing, data analysis)
- Developmental Psychology (understanding user needs across life stages—valuable for UX)
- Dean's List