Ken Jiang

(647) 936-9283 | ken.jiang@uwaterloo.ca | linkedin.com/in/ken-jiang | github.com/kenzoengineer | kenjiang.ca

EDUCATION

University of Waterloo   Waterloo, Ontario
Honours Computer Engineering - B.A.Sc Candidate   *Expected April 2025*

SKILLS

Languages: C#, C, C++, Java, Python, TypeScript, JavaScript, SQL, HTML, CSS
Frameworks/Libraries: React, Next, Jest, Node, Bootstrap, Tailwind, .NET
Tools: Git, SQL Server, PostgreSQL, MongoDB, Docker, Enzyme, AWS (S3, EC2), Unity

EXPERIENCE

Software Developer   January 2023 – April 2023
Senstar
- Owned design and development of all hardware device integrations into Senstar's client allowing for seamless addition of new perimeter security hardware through a **.NET C#** and **C++** back-end
- Built a reusable upgrade pipeline automatically converting legacy hardware implementations to newer integrations stored in **PostgreSQL** and **SQL Server**, increasing client security, feature adoption
- Enhanced a **TCP-based** access control security system event handler to support 100+ concurrent connections using **multi threaded sockets**, allowing many clients to send security commands simultaneously
- Revamped a **TypeScript** canvas control to allow for precise pixel-level masking of video feeds, allowing a user to restrict the processing region of face recognition and license plate detection increasing speed and accuracy

Software Developer   May 2022 – August 2022
Shoplogix
- Developed an extensible settings management system in **C#** and **TypeScript**, allowing plant, area, and machine level configuration with support for overriding and inheritance massively simplifying company-wide customization
- Built 5+ API **endpoints** in **C#** with **Nancy** which fetch data from **PostgreSQL**, exposing per user configuration options and simplifying machine **OPC** data collection
- Synthesized a **React** component to dynamically handle 100+ routing combinations simplifying future development
- Created and validated unit tests in **Jest** and **Enzyme**, achieving 96% code coverage over 5+ features

Application Developer   September 2021 – December 2021
QBuild
- Improved an Engineering Change Notice management web app to simplify design iteration and logistics
- Parallelized initial data fetching with task-based logic to speed up latency by up to 15 times
- Created a responsive image upload feature which processed files into **SQL Server** in under 100ms for a seamless user experience
- Built an extensible comments section from scratch using **Telerik UI**, complete with email notifications and employee tagging

Application Developer   January 2021 – April 2021
QBuild
- Overhauled **SQL Server View** and **Stored Procedure** implementations leading to 30 times improvements in data fetching speeds
- Created a script to parse 1000+ spreadsheets and transfer invoice data into our database vastly improving sales employee efficiency
- Automated creation of sales quotes in our CRM improving generation times by 60 times

PROJECTS

TextTracker | *Node, MongoDB, Discord.js, EC2, Docker*
- Build a Discord bot using **Discord.js API** to track and analyze word frequency
- Leveraged **Docker** to deploy app into **EC2** instances, greatly speeding up integration

WATonomous - Lead Full Stack Developer | *Next.js, Tailwind, Vercel*
- **Founding** lead developer of WATonomous' new website initiative, creating an appealing brand and source of information for prospective members and sponsors
- Built 30+ **Tailwind** styled components from scratch in **Next.js** and managed deployment with **Vercel**