HUA (Tony) LIU
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Summary

Full Stack Developer with 8+ years building enterprise-grade systems, specializing in React/Next.js, .NET, Node.js, cloud-native microservices, and LLM/AI automation.
 Expert in modernizing legacy systems, designing scalable cloud architecture, and delivering high-impact, user-centric products.
 Hands-on with LLM orchestration (Qwen, LLaMA, OpenAI, Claude), LangChain pipelines, microservices, Kubernetes, and full-stack development.

Strong communicator, end-to-end builder, and problem-solver who ships fast, improves performance, and creates measurable business value.

CORE SKILLS

Frontend

React • Next.js • Angular • Vue/Nuxt • React Native • TypeScript • Tailwind • Shadcn UI • Material-UI

Backend & API

.NET 9 / ASP.NET Core • Java Spring Boot • Node.js • FastAPI • Microservices • GraphQL

Cloud & DevOps

AWS (EKS/Lambda/S3) • Azure (AKS/Functions) • GCP (Cloud Run/GKE) • Docker • Kubernetes • Terraform • CI/CD

Data & Messaging

SQL Server • PostgreSQL • Oracle • MongoDB • Redis • Kafka • RabbitMQ

AI / LLM

Qwen3 • LLaMA • LangChain • RAG • YOLO11s • NER-BERT • OpenAI / Claude • LLM agent workflows

Experience

WYD | Vancouver, BC | *Full Stack Developer* **| May 2024– Present**

Responsible for building an omnichannel e-commerce + AI automation platform.

- Migrated legacy NopCommerce to .NET 9 + GKE, enabling 10K+ concurrent users with <1s response time.

- Built multi-gateway payment system (WeChat, Stripe, Alipay) processing $50K+ monthly.

- Reduced React Native mobile crash rate by 70% via performance profiling & async optimization.

- Implemented YOLO11s + LLaMA pipeline to remove Sora watermarks (accuracy 95%).

- Created resume parsing + job-matching AI system using Resume-NER-BERT-v2, MiniLM-L6-v2 & Qwen3-4B.

- Developed LLM orchestration layer using FastAPI + OpenAI + Claude + OpenRouter (ReAct agent).

- Integrated Shopify API for real-time sync (99.9% data consistency).

- Built AI resume website using Qwen3-0.6B + LangChain (LCEL + structured JSON workflows).

- Improved backend performance 45% with PostgreSQL indexing & Cloud Run caching.

Tech: .NET 9, React Native, GKE, K8s, GCP, FastAPI, Qwen3, LLaMA, Shopify API, Stripe API, Vue/Nuxt, PostgreSQL

AGAT Labs | Calgary, AB | *Programmer* **| Apr 2022–May 2024**

Responsible for Web Earth Modernization & AWS Microservices Migration(webearth.agatlabs.com)

- Built offline-first PWA with IndexedDB/service workers, ensuring 100% sync in low connectivity.

- Architected AWS EKS microservices, reducing latency 40%.

- Built large-scale batch editing interface using Angular + Wijmo Grid.

Tech: .NET 4.5, ASP.NET MVC, Angular 18, AWS EKS, Oracle

CIR Realty | Calgary, AB | *Full Stack Developer* | Nov 2018–Feb 2022

Responsible for Real Estate Portal Modernization & Azure Microservices(www.cirrealty.ca)

- Modernized 25-year legacy system → React + SSR, SEO rank improved #50 to #1.

- Integrated 10+ MLS feeds (200K+ listings/day), uptime 99.99% via Azure AKS.

- Reduced mobile bounce rate 35% with modern UI & responsive design.

Key Tech: ASP.NET Core MVC 2.2, Azure AKS, Google Maps API, React 16, Next.js 13

WEST GATE Inc. | Calgary, AB | Full Stack Software Developer | May 2017–Oct 2018

Delivered a new company portal using ASP.NET MVC + React.

Led small development team; improved deployment processes & productivity.

Key Tech: .NET 4.5, ASP.NET MVC 5, SQL Server 2012, React, AngularJS, Node.js, Umbraco CMS, AWS, Azure, Kubernetes

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U-Target Energy Inc. | Calgary, AB | *Software Developer* | Sep 2015–Apr 2017

Responsible for MWD Surface Tools Suite Optimization

- Optimized .NET 4.5/WinForms applications, achieving 300% performance gains through code refactoring and MVVM pattern implementation

- Integrated 9+ standalone tools into unified suite using PCAN protocols, reducing user training time by 40%
- Resolved critical system issues impacting field operations, including memory leaks and data synchronization failures

Key Tech: .NET 4.5, WinForms, SQL Server 2012, WPF, Mugen MVVM

Featured Projects

1. **AI Resume Intelligence System (Qwen + LangChain + LLaMA)(rm.tensorload.com)**

Built a production-grade AI workflow combining LLMs, embeddings, and structured extraction to automate resume understanding and job alignment.

What it does
  Extracts skills, experience, and achievements using Resume-NER-BERT
  Matches resumes to job descriptions with MiniLM-L6-v2 embeddings
  Uses Qwen3-4B-Instruct + LangChain LCEL to rewrite optimized resumes
  Generates recruiter-ready output with stable JSON schemas

Impact
 • Reduced manual screening time by 80%
 • Improved candidate-job matching accuracy to 92%
 • Enabled automated resume rewriting for 100+ roles

Tech
 Qwen3-4B, LangChain 1.0, LCEL, MiniLM-L6-v2, Resume-NER-BERT, FastAPI, Docker, PostgreSQL

2. **Migration of Legacy NopCommerce Platform to .NET 9 on Google Kubernetes Engine(www.cirrealty.ca)**

Led full-stack rebuild of core e-commerce infrastructure serving thousands of daily users.

What I delivered
  Migrated monolithic .NET Framework → .NET 9 microservices
  Deployed scalable infrastructure on GKE + Cloud Run

Refactored APIs improving performance by 45%
Implemented global payment orchestration (Stripe / WeChat / Alipay)

Impact
• Supported 10,000+ concurrent users with <1s latency
• Processed $50K+ monthly transactions
• Achieved 99.9% uptime through Kubernetes auto-scaling

Tech
.NET 9, Kubernetes (GKE), Cloud Run, PostgreSQL, React Native, CI/CD, Stripe API, Shopify API

3. AI Video Processing Pipeline for Automated Watermark Removal(www.tensorload.com)

Designed an AI-automation workflow combining CV + LLM vision reasoning.

What it does
Detects Sora/TTS watermarks using YOLO11s vision model
Uses LLaMA/VLM reasoning to refine detection
Applies automated masking + inpainting
Outputs clean, production-ready media content

Impact
• Improved watermark detection accuracy by 95%
• Reduced manual editing workload by 90%
• Integrated into media preprocessing pipeline

Tech
YOLO11s, LLaMA, Python, OpenCV, FastAPI, GPU inference, Docker

4.Offline-First Progressive Web App for Remote Field Operations(webearth.agatlabs.com)

Created an enterprise-grade PWA enabling offline data entry and reliable multi-device synchronization.

What it does
Supports full offline mode using IndexedDB + Service Workers
Automatically syncs when online with conflict resolution
Handles large datasets (500+ concurrent data edits)

Impact
 • Achieved 100% sync reliability in low-connectivity environments
 • Saved company $150K annually in field operation costs
 • Reduced data errors by 80%

Tech
 Angular, .NET Core, AWS EKS, IndexedDB, Service Workers, Oracle DB

Key Achievements

$150K Annual Cost Savings: Led e2e development of offline-first PWA at AGAT Labs
Top 3 SEO Ranking: Revitalized CIR Realty's web presence in competitive market
3x Performance Gain: Optimized MWD surface tools at U-Target Energy

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Education

M.S. Information & Signal Processing
Chengdu University of Technology