Chi Ngo

765-712-3590 | chingo.swe@gmail.com | linkedin.com/in/ | github.com/

EDUCATION

DePauw University

(Expected) May 2027

Bachelor of Arts in Computer Science GPA: 4.0

Coursework: Data Structures and Algorithms, Web Development, Computer System, Object Oriented Programming (OOP), Artificial Intelligence, Linear Algebra

EXPERIENCE

DePauw University

Apr 2025 – Jun 2025

Research Assistant

- Built a retrieval-augmented Q&A chatbot in **Python** for DePauw CS courses using the **LangChain** framework, **FAISS** vector store, and an open-source **Llama-3** 8B model, serving 100+ students per semester
- Built a data-processing pipeline in **Python** with **Spark** and **AWS Textract** to extract and clean text from **50**+ lecture PDFs, chunk content for embedding, and stage vectors for FAISS indexing

Orion Bank May 2024 – Aug 2024

Software Engineer Intern

Remote

- Developed a responsive customer dashboard in **React.js** with **Redux Toolkit**, implementing memoized selectors and 'useMemo' hooks to reduce re-renders by **45**% and boost perceived load time by **30**%
- Engineered OAuth2 login and signup flows using **Auth0** and **React Router v6**, integrating role-based access control to secure 5+ user tiers and achieve 100% compliance in internal security audits
- Built RESTful microservices in **Go (Gin)** with PostgreSQL and GORM ORM, handling **10K**+ daily transactions and maintaining sub-50 ms p99 latency under load

AetherMind AI

Jan 2024 – May 2024

Software Engineer Intern

San Francisco, CA

- Containerized inference microservices with **Docker** and **Kubernetes** (EKS), using **Helm** charts to standardize deployments and cut rollout time by 60%
- Instrumented services with **Prometheus** and built custom **Grafana** dashboards to monitor CPU/memory, reducing mean time to resolution (MTTR) by **35**%
- Implemented a GitHub Actions CI/CD pipeline for build–test–deploy, including Docker image scans (Trivy) and infrastructure linting (tflint), slashing merge-to-prod time by 50%

Projects

Putco | MongoDB, Express, React, Node js, Vite, Cloudinary, Google API

Feb 2024 – Apr 2024

- Developed a **MERN**–Vite front end with **Cloudinary** image uploads and React Query caching to support 500+ business listings, cutting page load time by 30% across varied network conditions and device types
- Integrated Google Places API and MongoDB geospatial indexing for proximity search, boosting search relevancy by 40% and increasing user engagement by 25%, tracked via Google Analytics events
- Implemented Vite SSR and Redis caching layer for service pages, reducing Time-to-First-Byte by 50% and improving SEO crawlability, while supporting dynamic meta-tag rendering

Gold and Go | React, Node js, Express, PostgreSQL, Google API

Jul 2023 – Oct 2023

- Architected ride-matching in **Node.js** using **PostGIS** and a custom distance-weighting algorithm, reducing wait times by 15% and improving matching efficiency by 25% during peak hours
- Built real-time chat and notification service with Socket.io and Redis Pub/Sub, serving 2K+ rides with sub-100 ms latency and integrated push alerts via **Firebase Cloud Messaging**
- Configured GitHub Actions CI/CD and Dockerized services for automated deployments to Heroku, achieving zero-downtime releases and 95% pipeline success rate with encrypted environment secrets

Technical Skills

Languages: Python, Java, C++, TypeScript, JavaScript, Go, C, Bash, HTML/CSS, SQL

Frameworks/Tools: Spring Boot, Flask, FastAPI, React.js, Next.js, Node.js, Express, Tailwind, Redux, gRPC

Databases: PostgreSQL, MongoDB, Redis, MySQL, DynamoDB, Supabase

Cloud/Infra: AWS (ECS, S3, RDS, Lambda), GCP, Docker, Kubernetes, GitHub Actions, Terraform, Linux ML/AI: PyTorch, TensorFlow, Hugging Face Transformers, scikit-learn, NumPy, LangChain, OpenAI API