Jeffrey Lin

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EDUCATION

University of Waterloo

Sep 2024 – Apr 2029

Bachelor's of Applied Science in Systems Design Engineering

Work Experience

Software Engineer Intern

Jan 2025 – Apr 2025

Richmond Hill, ON

Agentnoon Inc (YC W22)

- Engineered access control and permissions logic for 100+ business dashboards, supporting 5,000+ users
- Developed 10+ database migrations using Sequelize to support new features and optimize data schemas
- Designed efficient tree traversal algorithms for org charts, improving node search and reordering speed by 80%
- Refactored legacy Vue components and optimized rendering logic, boosting component reusability by 3×
- Collaborated with cross-functional teams to ship internal tools used by 10+ enterprise clients like Nestlé

PROJECTS

UWSummit (Acquired) - Social platform and Job board 🗹

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Next.js, Supabase, ProxyCurl, React, PostgreSQL, Node.js

- Co-founded and developed a high-traffic social platform from scratch, driving 700+ users in the first 3 days
- Achieved 100,000+ page visits and maintained a low 16% bounce rate, indicating strong user engagement
- Secured the interest of 20+ companies like Shopify and YC-backed startups towards the job board
- Integrated LinkedIn scraping via custom **RESTful API routes** to auto-generate user profiles with no friction
- Implemented secure authentication workflows with Supabase Auth, improving user onboarding and security
- Acquired at a valuation of \$10,000 by Linkd (YC X25), validating technical execution and product quality

DIH - AI Meta-Framework for LLM Apps 🗷

Node.js, TypeScript, Next.js, OpenAI, Anthropic, Vercel

• Built and published **DIH**, a TypeScript-based meta-framework on Next.js that simplifies building AI wrapper apps

- Created modules for chat completions, tool calling, prompt templating, and real-time streaming
- Designed a provider-agnostic system for switching between LLMs (e.g. GPT-4, Claude) with minimal changes
- Developed **create-dih-app**, a CLI to scaffold projects with standard structure and starter examples
- Added utilities like token counters and prompt cost tools to help developers manage LLM usage

Agility - LLM driven Workflow Automation Platform

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Typescript, Deno, 10+ external APIs (GitHub, Gmail, OpenAI, Discord, etc.), Next.js

- Architected a full-stack workflow platform with 20+ modular agents and third-party API integrations
- Developed an AI-driven workflow generation feature to create multi-step workflows from natural language
- Built a dynamic visual canvas, allowing users to drag, drop, and connect agents for no-code automation.
- Built a microservices-style backend with Serverless Functions to orchestrate agent workflows and sessions
- Handled OAuth 2.0 and token storage for Gmail, GitHub, Discord, and LLMs to enable API automation
- Implemented secure authorization using JWT validation and CORS handling in serverless functions

PackShots - AI-Powered Packing App

React native, Expo, Google Cloud Vision, OpenWeatherMap

- Built a cross-platform React Native/Expo app used by 20+ travelers, reducing packing prep time by 40%
- Used Google Vision and weather APIs to detect 50+ items and generate location-based packing suggestions
- Matched detected items to list entries with 90%+ accuracy using Levenshtein distance for similarity scoring
- Enabled hands-free list updates with speech recognition, improving UX for on-the-go or multitasking users
- Implemented full-featured packing list CRUD with offline storage and real-time progress tracking

TECHNICAL SKILLS

Languages: Java, Python, C, C++, C#, JavaScript, TypeScript, HTML, CSS, PHP, SQL Tools: Git, Google Cloud Platform, AWS, Firebase, Supabase, VS Code, Unity, Node.js, MySQL, PostgreSQL, Bash Frameworks and Libraries: Next.js, React.js, React Native, Vue.js, Vite, Expo, Django, Express.js, NumPy, Bootstrap, jQuery, TensorFlow, PyTorch, OpenCV, WPILib