Jindo Kim

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Professional Summary

Engineer who solves complex technical challenges by understanding the complete picture, from identifying business, client, and user needs to designing solutions where clear contracts between systems enable reliable interactions.

Professional Work Experience

Cloud DevOps Engineer and Software Developer - VARLab, Waterloo, ON   *May 2024-Jul 2025*

- Transformed CI/CD infrastructure by architecting a modularized build/test environment for Unity projects, replacing dedicated servers with on-demand cloud services, achieving 94.88% cost reduction and eliminating development bottlenecks.
- Architected Jenkins-specific layered infrastructure applying design patterns (Command, Strategy, Template Method) to address 14-month technical debt, centralizing 5 duplicated pipelines into reusable abstractions and reducing maintenance overhead from 15+ files to 1-2 files per change.
- Designed 3-level hierarchy logging system with standardized interface and system-enforced consistency to address scattered, inconsistent logging within Jenkins platform constraints (restricted output customization), eliminating manual enforcement and establishing structured output that simplified debugging.
- Implemented domain-specific layered architecture for HTTP communication triggered by undetected SSL expiration (2 days), consolidating end-to-end HTTP lifecycle implementations per endpoint into centralized service with comprehensive exception handling.
- Resolved critical Unity build infrastructure bottleneck where even 2 concurrent builds caused server crashes by architecting per-team workspace isolation with incremental Git strategy (reusing clones and build artifacts) and WebGL optimization tuning, achieving 80% faster builds, 90% CPU reduction, and zero downtime.
- Optimized containerized deployment by migrating CI/CD infrastructure to Linux (93% faster Docker builds) and implementing secure container image strategy (optimized Linux distribution + Node.js versions), reducing vulnerabilities from 73 to 3 through security analysis.
- Resolved complex cloud infrastructure compatibility issues preventing Docker deployment on Azure VMs by identifying Trusted Launch security limitations, implementing VM migration workflow with OS disk preservation, and establishing containerized application deployment pipeline.
- Designed and implemented CI/CD quality assurance pipeline for Node.js projects from scratch by researching and integrating industry-standard tools, deploying SonarQube infrastructure with PostgreSQL and secure HTTPS access, and establishing automated code quality gates and security vulnerability scanning.
- Collaborated on enterprise-grade security auditing using CIS benchmarks for LMS hosting infrastructure and contributed to building LTI-compliant server with OAuth 2.0 integration, enabling secure external content delivery for D2L/Moodle environments.

Additional Professional Experience

Backend Development Lead (Part-time Contract) – Helprr.ai, Toronto, ON   *Sep 2025-Present*

- Bridged communication gap between non-technical CEO/PM and technical teams by coordinating user case requirements, establishing API contract documentation process, and configuring test environment to enable independent development of frontend and backend teams.
- Analyzed existing Django codebase and documented system architecture while learning the framework, mentoring junior backend developer through database schema design and API implementation.

Backend Developer (Part-time Contract) - *Pilot Things, Montréal, Québec*   *Feb 2025-Mar 2025*

- Contributed to IoT platform integration enabling Pilot Things data visualization through Thingsboard, an open-source IoT platform, for enhanced monitoring and analytics capabilities.
- Built integration service layer using Java and Spring Boot wrapping Thingsboard REST APIs with Model-Service-Interface architecture, providing type-safe abstraction for complete platform operations.
- Created comprehensive integration tests validating API compatibility with Thingsboard's Role-Based Access Control system, achieving 100% successful data delivery and operation verification.

Web Developer (Volunteer) - *Affinity Mentorship Foundation, Calgary, AB*   *Dec 2023-May 2024*

- Developed a website from scratch using React.js, TypeScript, Tailwind CSS, and Express.js, implementing modular, component-based architecture to enhance reusability and maintainability.
- Boosted team efficiency by creating a YouTube tutorial on Azure DevOps Boards to support Agile adoption.

Projects

Unity CI Enabler - *Open Source Project*   *May 2025-Present*

- Building open-source tool enabling Unity developers to establish CI pipelines without DevOps or cloud knowledge through plug-and-play serverless architecture.

Technical Skills

- **Cloud Infrastructure Management**: Azure (Container Services, Batch Computing, Functions)
- **DevOps**: Jenkins, SonarQube, Docker, Shell Scripting, Nginx
- **Database**: MongoDB, MS SQL, MySQL, PostgreSQL
- **Full-Stack Development**: Express.js, Spring Boot, ASP.NET, Django, Angular
- **Languages**: C#, Python, Groovy, Java, JavaScript, TypeScript

Education

Computer Programming and Analysis - *Conestoga College, Waterloo, ON*   *Jan 2023-Present*

- Expected Graduation: April 2026   • GPA: 3.95/4.00

Additional Experience

Deputy Platoon Leader - *Ranger Regiment, South Korea*

- Led a team of 40 while managing resources and operations, influencing 120 others over four years.