

Yuchen (David) Li

✉ liyuchen990529@gmail.com — 🌐 davidliyc.com — in david-li-yuchen — 📄 D0529Li — 📞 +1-519-701-1836

SUMMARY

Software Developer with experience delivering production-ready **backend, full-stack**, and **API-driven** features across .NET, Angular, and SQL Server. Skilled in improving **system reliability, security**, and **process predictability** in real-world mission-critical deployments.

EXPERIENCE

- **Software Developer** Oct 2023 – Present
Advantive LLC (formerly PINpoint Information Systems Inc.) Toronto, ON, Canada
 - Led the technical migration of core services to **.NET 10** and refactored multiple legacy integration projects into SDK-style **.NET 8** architectures; authored **YAML CI/CD** pipelines to modernize and automate legacy build processes.
 - Designed and engineered a **Windows background service** utilizing robust file-lock retry logic and custom error recovery; automated the ingestion, validation, and parsing of structured drop-folder files to seamlessly process hundreds of automated manufacturing work orders daily through internal **REST APIs**.
 - Resolved critical security vulnerabilities and architectural gaps within federated login flows, including **JWT** service account token refresh failures and cross-operator session isolation bugs; aligned the system with modern identity best practices by deprecating a legacy token validator and upgrading core **OIDC** dependencies.
 - Optimized data access performance by migrating a legacy data layer to **Entity Framework Core** and designed new **REST API** endpoints to synchronize real-time production step-states and quality data for third-party integrations.
 - Identified and eliminated query performance bottlenecks across stored procedures and web service layers, significantly reducing latency and improving UI responsiveness in high-volume, data-heavy production deployments.
 - Shipped core operator-facing features for a **.NET Core Manufacturing Execution System (MES)** app — including custom defect filters, default reason auto-selection, and in-app video support — while resolving 20+ critical regression and stability defects to improve shop-floor reliability.
 - Served as **Scrum Master**, successfully onboarding a development team with no prior Agile experience to Scrum methodologies; **improved sprint predictability from below 50% to 80–90%** while facilitating Agile ceremonies and mentoring junior developers.
- **Software Developer (Co-op)** Sep 2022 – Apr 2023
PINpoint Information Systems Inc. Burlington, ON, Canada
 - Built a multi-threaded **database replay tool** that improved testing **throughput by 10X**, significantly reducing QA bottlenecks and strengthening core system scalability.
- **Software Developer (Co-op)** May 2021 – Aug 2021
Digital 14 Mississauga, ON, Canada
 - Developed secure **Java-based backend services** for communication platforms while supporting enterprise-grade code reviews and **CI/CD** security adoption.
- **Software Developer (Co-op)** Jan 2020 – Apr 2020
JSI Telecom Kanata, ON, Canada
 - Contributed to the **UI/UX** development of core product modules, collaborating within an **Agile** team to deliver iterative enhancements for enterprise clients.

TECHNICAL SKILLS

Languages: C#, SQL, JavaScript, TypeScript, Java, C++, C
Frameworks: .NET 8/10, ASP.NET Core Web API, Angular, Entity Framework Core, WPF
Database: SQL Server, Stored Procedures, Indexing, Query Optimization
Tools: Azure DevOps, Git, PowerShell, Postman, Visual Studio, IIS
Concepts: REST APIs, MVVM, OAuth 2.0, Microservices, CI/CD, Distributed Systems

EDUCATION

- **University of Waterloo** Waterloo, ON
Bachelor of Computer Science – Co-operative Program (Honours) Sept 2018 – Aug 2023
 - **Scholarships:** President's Scholarship of Distinction