TEDDY KALP

(647) 786-4988 • teddy.kalp@gmail.com • linkedin.com/in/teddy-kalp • Calgary, Alberta, CAN

PROFESSIONAL SUMMARY

Results-driven Software Engineer with 5 years of progressive experience spanning financial technology, biotech, and cloud infrastructure. Beginning as a junior developer in fintech, evolved into a multifaceted engineer specializing in cloud-native architecture, data visualization, and application modernization. Currently dual-hatted as both a cloud technology engineer in the biotech space and independent software development consultant, focusing on transforming complex datasets into intuitive, actionable visual insights. Combines strong academic credentials (B.Sc. Computer Science with Honours, M.Sc. Information Security and Privacy from University of Calgary) with hands-on expertise in full-stack development, domain-driven design, large-scale data visualization, cloud migration strategies, and security-first architecture. Proven track record of building scalable systems that process and visualize massive datasets while transforming legacy applications into well-structured, cloud-optimized solutions that enhance both performance and user experience.

TECHNICAL SKILLS

Languages: C#, Python, JavaScript/TypeScript, Ruby, SQL

Frontend: Blazor, React, React Native, Next.js

Backend: ASP.NET Core, Entity Framework, FastAPI, Ruby on Rails

Databases: PostgreSQL, MySQL, SQLite, MongoDB, Redis, Cassandra

Cloud & Infrastructure: AWS, Azure, Digital Ocean, EKS, Docker, Terraform, Helm, Packer

CI/CD: GitHub Actions, Jenkins, ArgoCD

Architecture: Domain-Driven Design, Microservices, REST, gRPC, RabbitMQ

Security & Testing: NUnit, Jest, SonarQube, VeraCode

Monitoring: Grafana, Centralized Logging

Machine Learning: Python ML frameworks including Tensorflow, PyTorch and Scikit Learn

PROFESSIONAL EXPERIENCE

Founder & Principal Consultant
June 2024 – Present
TK Software Solutions, Calgary AB, CAN

- Provide end-to-end application modernization services for clients seeking to migrate legacy systems to cloud-native architectures through domain-driven design and strategic modularization
- Lead framework upgrade initiatives with structured, risk-mitigated approaches ensuring zero-downtime transitions and maintaining business continuity throughout modernization process
- Conduct comprehensive security assessments and penetration testing of client applications, identifying vulnerabilities and implementing remediation strategies
- Partner with forward-thinking clients committed to technical excellence, translating complex architectural concepts into actionable roadmaps that balance innovation with pragmatic business needs
- Apply cross-industry expertise from FinTech and BioTech backgrounds to solve diverse technical challenges across multiple domains and technology stacks

Digital Product Developer
November 2023 – Present
Cultivated Code, Calgary AB, CAN

- Led security hardening initiative eliminating 90-95% of high/medium vulnerabilities and re-architected Docker containers using secure Alpine images, reducing attack surface across entire codebase
- Architected cloud migration from legacy desktop application to AWS microservices, implementing MessagePack compression for RabbitMQ messages to achieve significant memory optimization despite complex serialization constraints
- Designed config-driven Blazor application with domain-separated architecture and orchestrator pattern, enabling parallel development and client-customizable workflows without code changes
- Developed interactive data visualizations and enhanced processing pipelines for mass spectrometry analysis, empowering scientists to make faster, data-driven decisions in peak reviewing workflows
- Explored machine learning solutions for automated integration reviews and contributed to business development efforts across multiple client projects

Software Developer

May 2021 – November 2023

SIACharts, Calgary AB, CAN

- Executed database migration from SQL Server to PostgreSQL, reducing infrastructure costs while maintaining system performance and data integrity across production environments
- Built marketing content management system enabling non-technical stakeholders to independently upload and manage promotional materials, streamlining content deployment workflows
- Re-architected financial backtesting engine with multi-layer caching and custom buy/sell rule engine, delivering investment strategies that outperformed traditional benchmarks
- Developed Private Wealth onboarding application for retail Investment Advisors, accelerating client onboarding timelines from weeks to days through workflow automation
- Mentored junior developers on application architecture, debugging methodologies, and best practices, building team confidence and technical capabilities

Machine Learning Developer

May 2020 – Nov 2020

Retalon, Toronto ON, Canada

- Developed neural network models using TensorFlow to predict retail sales trends based on clothing attributes and metadata, achieving F1-scores matching or exceeding existing production algorithms
- Built end-to-end machine learning pipelines encompassing feature engineering, data exploration, model training, validation, and evaluation for early-stage sales forecasting
- Focused on predicting first 3-week sales performance, enabling data-driven inventory and marketing decisions for retail operations
- Delivered biweekly presentations to stakeholders, translating complex model performance metrics and predictions into actionable business insights

EDUCATION

Bachelor of Science in Computer Science (Honours)

Graduated May 2021

University of Calgary, Calgary, AB • GPA: 3.6/4.0

Master of Information Security and Privacy

Graduated May 2023

University of Calgary, Calgary, AB • GPA: 4.0/4.0

CERTIFICATIONS

- ISC2 CC (Certified in Cybersecurity) (2023)
- CompTIA Security+ (2024)