

## Summary

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Software Developer with a Bachelor of Computing and 2.5+ years of production experience across companies such as Adknown, Tulip, and NCR. I have successfully shipped full-stack features using React, PHP, and SQL, consistently delivering optimized code in agile environments. My background includes reducing transaction costs by 20% through efficient backend logic and maintaining legacy codebases and currently performing technical audits on AI-generated code, focusing on logic validation and root-cause analysis.

## Technical Skills

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**Languages:** TypeScript, JavaScript, Python, Java, PHP, SQL (MySQL, Postgres)

**Frontend:** React, Next.js, Tailwind, MaterialUI, Bootstrap

**Backend:** Node.js, Express, Spring

**Cloud:** AWS (S3, EC2, Cloudfront, Route 53, IAM)

**DevOps:** Docker, Terraform, GitHub Actions, CI/CD

**Project Management:** Git, Jira, Bitbucket, GitLab, GitHub

**Methodologies:** Agile, Scrum, Clean Code, Clean Architecture, Least Privilege, Well-Architected Framework

**OS:** Linux (Ubuntu, Debian), Windows, WSL, MacOS

## Experience

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### Software Developer | Contract | Data Annotation (Remote, ON)

Apr 2024 - Present

-Leveraged Cline agentic IDE integrations to iteratively develop full-stack (React/TypeScript/Postgres) applications supporting AI model evaluation workflows.

-Containerized multi-service stacks with Docker, optimizing model-test execution pipelines.

-Analyzed and improved LLM code-generation reliability through Reinforcement Learning from Human Feedback (RLHF).

### Software Developer | Co-op | Adknown (Guelph, ON)

Jan 2023 - Aug 2023

-Delivered production features across a React, PHP, MySQL, AWS and Docker stack.

-Dockerized two ad-tracking pixels, lowering environment setup time by 40%.

-Architected a Bing campaign linkage tool, improving marketers' CPC performance.

### Software Developer | Co-op | Tulip Retail (Kitchener, ON)

May 2022 - Aug 2022

-Delivered features on the LiveConnect & Appointments platform (PHP, React, Docker).

-Contributed to the Tulip Appointments NPM package used by clients such as Chanel and Michael Kors.

-Integrated the appointments widget into the core Clienteling product, improving high-value customer booking flows.

### Software Developer | Co-op | NCR Corporation (Guelph, ON)

Sep 2021 - Dec 2021

-Worked on the API Toolkit (Draft) team using Jenkins, Docker, React, OpenAPI and Spring.

-Collaborated in an agile environment, completing JIRA sprint work with high delivery velocity.

### Web Developer | Co-op | Heart & Stroke (Toronto, ON)

May 2021 - Aug 2021

-Built a standalone React/Node/MySQL direct-mail donation platform.

-Integrated Stripe and Moneris SDKs, improving PCI compliance and reducing transaction fees by 20%.

## Personal Project

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### AWS/Terraform Managed Mult-Site Deployment

-Leveraged one centralized Terraform [repository](#) to deploy 2 distinct static/serverless sites to AWS, all concatenated under one root domain, and automated deployments via GitHub Actions CI/CD.

[justinklein.ca](http://justinklein.ca): Next.js/TypeScript portfolio site.

[get-smart.justinklein.ca](http://get-smart.justinklein.ca): Astro static site for technical notes.

## Education

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### Bachelor of Computing, Software Engineering (Co-op) — University of Guelph | Minor in Business | Graduated Jun 2024

#### Capstone Project: [Full-Stack Web Games Repository](#)

-Collaborated on a team of 6 developers across 9 sprints to iteratively develop a React/Three.js/PHP/Docker full-stack application that hosted a suite of farm-related 2D and 3D web games.

-Led the dockerization of the application, ensuring 100% compatibility across multiple OS devices (Linux, Windows, WSL and MacOS) for all developers' local development.

-Spearheaded principal React development for both the platformer and 3D game, ensuring that Three.js has principal DOM rendering control over React for each game's core animation loop.