

Summary

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

- 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

- 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

- 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](#): Next.js/TypeScript portfolio site.
 - [get-smart.justinklein.ca](#): Astro static site for technical notes.

Education

- 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.