

Joshua Bellamy

Software Engineer

Lincoln, Ontario, Canada · smysnk.com · [LinkedIn](#) · [GitHub](#)



Psidox

Founder / Principal Software Developer

Self-employed

Jan 2025 - Present

Lincoln, Ontario, Canada

Founded Psidox as an independent software and AI development studio focused on applied AI tooling, developer infrastructure, automation systems, research interfaces, and production web platforms.

Tools: [TypeScript](#), [React](#), [Next.js](#), [Node.js](#), [GraphQL](#), [Python](#), [Go](#), [PostgreSQL](#), [Docker](#), [Kubernetes](#), [Terraform](#), [AWS](#), [Playwright](#), [LLM Agents](#), [Qwen](#), [ComfyUI](#), [RunPod](#), [OpenSCAD](#), [JSCAD](#), [Robot Framework](#)

- Built AI-assisted creative and research tooling around [Qwen](#), [ComfyUI](#), [RunPod](#), media analysis pipelines, prompt handoff workflows, workflow graphs, image/video generation review surfaces, and experiment tracking.
- Developed local-first developer infrastructure including project discovery, process supervision, terminal/log streaming, remote [Go](#) agents, deployment instances, and browser-based control planes for multi-repository workspaces.
- Designed and shipped production [Next.js/React](#) applications with [GraphQL](#) APIs, [PostgreSQL](#) persistence, SSR-friendly rendering, SEO improvements, authenticated admin workflows, markdown publishing, asset management, and responsive project/blog/model views.
- Created and maintained test infrastructure across projects, including [Playwright](#) coverage, Test Station reporting, CI publishing flows, benchmark dashboards, artifact capture, badge routes, and framework-agnostic test result normalization.
- Built automation frameworks for GUI testing and desktop workflows, including SikuliGO migration work, [Python/Robot Framework](#) bindings, image-matching driven test execution, and Dockerized [Qwen](#)-assisted test harnesses.
- Developed CAD and fabrication tooling around varcad.io, [OpenSCAD/JSCAD](#) conversion, generated STL/report review, repository preview media, Printables model ingestion, and browser-based parametric design workflows.
- Implemented infrastructure and deployment work across [Docker](#), [Kubernetes](#), Fleet, [Terraform](#), CloudFront, [AWS](#)/ECR, secrets handling, runtime hardening, security audits, and production deployment verification.



VizworX Inc.

Software Developer

Full-time

Mar 2021 - Dec 2024 · 3 yrs 10 mos

Calgary, Alberta, Canada

Partnered with clients and internal teams to translate product requirements into execution plans and production-ready technical solutions.

Tools: [Node.js](#), [React](#), [MUI](#), [GraphQL](#), [Unity](#), [VR/AR](#), [C#](#), [Three.js](#), [MQTT](#), [CI/CD](#), [Terraform](#), [AWS](#), [Kubernetes](#)

- Collaborated closely with UI/UX designers to build intuitive [React](#) front-end experiences with consistent component patterns and maintainable architecture.
- Enhanced Canada Energy Regulator web applications, improving usability, performance, and overall product quality for end users.
- Worked with project managers to define scope, milestones, and delivery plans, improving predictability and stakeholder alignment.
- Performed code reviews and architectural reviews to raise code quality, reduce defects, and improve long-term maintainability.
- Delivered full-stack features across web and immersive experiences using [Node.js](#), [GraphQL](#), [Unity](#), and cloud-native infrastructure.



WM Holdings

Senior Software Engineer - Developer Tools and Services

Full-time

Mar 2019 - Oct 2019 · 8 mos

Calgary, Alberta, Canada

Joined a founding initiative to establish observability standards and tooling across the WM Holdings platform.

Tools: [Golang](#), [Node.js](#), [Prometheus](#), [Grafana](#), [Datadog](#)

- Built custom service discovery utilities to improve metrics coverage and reliability across distributed services.
- Prototyped and rolled out a large-scale Thanos/[Prometheus](#) stack to support scalable long-term metrics retention.
- Implemented shared observability libraries for [Prometheus](#) metrics and distributed tracing across multiple services.
- Automated dashboard generation and standardized service-level visibility for engineering and operations teams.

Senior Systems Engineer

Full-time

May 2017 - Mar 2019 · 1 yr 11 mos

Calgary, Alberta, Canada

Owned and evolved core infrastructure and platform operations as part of the central DevOps team.

Tools: [Chef](#), [Terraform](#), [Docker](#), [Rancher](#), [AWS](#), [Kubernetes](#), [CI](#), [Consul](#), [CircleCI](#)

- Led platform administration including performance tuning, load testing, monitoring, capacity planning, backup/recovery, patching, and upgrades.
- Managed development, test, QA, and production environments to improve deployment consistency and operational stability.
- Contributed to infrastructure architecture and cloud platform design for scalability, resilience, and security.
- Implemented network security controls and operational hardening aligned with evolving security best practices.
- Produced and maintained technical documentation to support change management and reliable production operations.
- Participated in a 24/7 on-call rotation, troubleshooting production incidents and reducing mean time to recovery.



GrowOne

Senior Software Developer

Full-time

May 2015 - May 2017 · 2 yrs 1 mo

Calgary, Alberta, Canada

Tools: [React](#), [Redux](#), [GraphQL](#), [Meteor](#), [MongoDB](#), [AWS](#), [Docker](#)

- Built and maintained full-stack Node.js applications with [React/Redux](#) front ends and [GraphQL](#) APIs.
- Prepared services for production deployment on [AWS](#) with containerized delivery workflows.
- Implemented deployment pipelines from acceptance through production to improve release speed and reliability.
- Built ChatOps integrations to streamline QA and deployment workflows and reduce manual operational overhead.



MyMobileCoverage

Lead Software Developer

Full-time

Aug 2013 - Nov 2014 · 1 yrs 4 mos

Calgary, Alberta, Canada

Architected and delivered the embedded service and front-end interface for MyMobileCoverage's first Benchmark Box (BMB) release, enabling multi-carrier RF, network-performance, and GPS data collection with reliable event delivery.

Tools: **Angular**, **Java**, **Python**

- Refactored **Java** prototype code into production-ready services with a focus on testability, stability, and maintainability.
- Built an AngularJS dashboard and custom WebSocket protocol for two-way communication with backend services.
- Created unit and functional test suites to validate device behavior under varied real-world operating conditions.
- Authored technical documentation for system operation, maintenance, and support procedures.
- Maintained engineering standards and mentored incoming developers to improve team delivery quality.

Software Developer

Full-time

Jun 2013 - Aug 2014 · 1 yr 3 mos

Calgary, Alberta, Canada

Tools: **C#**, **Node.js**, **GIS**, **CI**

- Refactored legacy **C#** service-layer code for Mono compatibility to support migration to Linux-based infrastructure.
- Developed RESTful **Node.js** endpoints integrating OpenStreetMap and Google **GIS** services.
- Built Python automation scripts to reduce manual processing and improve workflow efficiency.
- Created Docker images for services and build pipelines to standardize development and production environments.
- Implemented and maintained **CI** pipelines across Android, iOS, and backend **Node.js** services.
- Supported engineering growth by participating in developer interviews and hiring decisions.



SMART Technologies

Software Test Developer

Full-time

Feb 2012 - May 2013 · 1 yrs 4 mos

Calgary, Alberta, Canada

Tools: **Python**, **JavaScript**, **CI**

- Optimized build pipelines to improve stability, maintainability, and overall engineering throughput.
- Reduced **JavaScript** test runtime using distributed execution, improving developer productivity while maintaining full browser coverage.
- Designed and implemented centralized GUI test infrastructure across Windows, macOS, and Linux.
- Developed robust automation frameworks for validating collaboration software on multi-machine test setups.
- Integrated open-source tools (**Python**, Sikuli, VMware, Robot Framework, TeamCity, STAF/STAX) into a unified testing platform.
- Presented internal quality-engineering initiatives to an audience of 200+ developers.