Stephen O'Neil

Full Stack Web Application Developer

9+ years frontend | 6+ years backend & DevSecOps
github.com/Stephen-ONeil | stephenlevioneil@gmail.com

➤ A **lead developer** & **senior technical advisor**, modernizing Canada's public health **data platforms** & **infrastructure**
➤ Previously **lead developer** on **GC InfoBase** (canada.ca/gcinfobase, github.com/TBS-EACPD/infobase), a **React SPA client** backed by a **serverless GraphQL API**

Curriculum Vitae

Lead Developer & **Senior Technical Advisor** (acting) | 06/2023 - ongoing
Data, Surveillance and Foresight Branch, Public Health Agency of Canada
- ➤ Contributed logging utilities to the branch's internal Django library, enabling standardized, enriched, and security policy compliant logs in both Google Cloud & Azure environments
- ➤ Lead infrastructure and security architecture design and implementation for the branch's first Kubernetes-based Django application deployment
  - ➢ Coordinated with project managers, application developers, and IT security to collect and track business and technical requirements, designing a corresponding architecture
  - ➢ Achieved a production-ready deployment and provided lessons-learned for future kubernetes use within the organization

Lead Developer & **Technical Advisor** | 01/2023 - 06/2023
Science and Parliamentary Infrastructure Branch, Public Services and Procurement Canada
- ➤ Advised on technical aspects of a branch-wide data policy refresh
- ➤ Triaged an inherited portfolio of ~20 projects in various stages from prototype to pilot
  - ➢ Identified 10+ retired or stalled projects to decommission, directly reducing cloud bills, maintenance burden, and potential risks & attack surface
  - ➢ Matured the remaining applications and infrastructure by eliminating manual deploy steps, implementing automated rollback capabilities, hardening configurations, etc.

Lead Developer | 09/2017 - 12/2022
Expenditure Management Sector, Treasury Board of Canada Secretariat
- ➤ Lead the GC InfoBase project beginning in Summer 2018; held responsibility for the project's technical direction, overall design, and for the team's developer talent
  - ➢ Iterated on and maintained the project's large React frontend
    - ▷ E.g. through gradual refactors to legacy code, brought the average turn around of routine site updates [from a baseline of 5 business days to an average of 0.13](#)
  - ➢ Built backend microservices to support the main application
    - ▷ E.g. built a versatile template based form service, used to collect, validate, store, and alert the team across multiple lines of in-app user feedback
  - ➢ Architected and administered infrastructure and operations for the project
    - ▷ E.g. transitioned hosting from tenancy in an external team's servers to cloud platforms & an in-house DevOps culture, taking deploy times from days to minutes
  - ➢ Developed tooling to multiply team productivity and reinforce best practices
    - ▷ E.g. implemented automated end-to-end WCAG 2.1 accessibility testing for CI
  - ➢ Championed code standards, review practices, testing, CI/CD, and working in the open
    - ▷ E.g. sold stakeholders on open sourcing the project; was awarded in recognition of the direct positive impacts one year later
  - ➢ Hired, supervised, and mentored junior developers and CO-OP students
- ➤ Built the data collection tool used for the centralized tracking of COVID-19 related expenditures across all government departments
  - ➢ Quickly learnt Python, Django, an existing internal platform's code & environment, and the business requirements; met the ambitious 3 month deadline provided for launch
  - ➢ Contributed lasting improvements to the existing platform's testing practices

CO-OP Student & part-time developer | 01/2015 - 09/2017
Office of the Chief Human Resources Officer, Treasury Board of Canada Secretariat
- ➤ Self-taught JS, HTML, CSS, and Git; developed the early HR data portions of GC InfoBase

Languages
- ➤ TypeScript & JavaScript
- ➤ HTML
- ➤ CSS & Sass
- ➤ Python
- ➤ SQL
- ➤ sh / Bash / POSIX shells

Libraries & Frameworks
- ➤ React
- ➤ GraphQL
- ➤ Lodash
- ➤ Jest
- ➤ React Testing Library
- ➤ Axe-core
- ➤ Webpack
- ➤ NextJS
- ➤ Django
- ➤ OpenTelemetry

Tools & Software
- ➤ Git
- ➤ VSCode
- ➤ Linux
- ➤ Docker
- ➤ Kubernetes
- ➤ Kustomize
- ➤ PostgreSQL
- ➤ MongoDB

Platforms
- ➤ Google Cloud Platform
- ➤ DigitalOcean
- ➤ CircleCI
- ➤ GitHub Actions

Other Skills & Competencies
- ➤ Architecture
- ➤ Automation
- ➤ Application security
- ➤ Accessibility
- ➤ Mentorship
- ➤ Strategic leadership

Certifications
Google Cloud Certified - Professional Cloud Architect
[(tinyurl.com/oneil-gcp-cert)](tinyurl.com/oneil-gcp-cert)

Education
Honours B.Sc. Physics-Mathematics, uOttawa
2017, Cum Laude