

# Stephen O'Neil

## Full Stack Web Application Developer

10+ years frontend | 7+ years backend & DevSecOps

[github.com/Stephen-O'Neil](https://github.com/Stephen-O'Neil) | [stephenlevioneil@gmail.com](mailto: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](https://canada.ca/gcinfobase), [github.com/TBS-EACPD/infobase](https://github.com/TBS-EACPD/infobase)), a React SPA client backed by a serverless GraphQL API

## Resume

**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
- Triageed 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

## Certifications

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

## 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

## Education

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