

Neel Patel

neelpatel4@cmail.carleton.ca | notneelpatel.xyz/portfolio | github.com/NotNeelPatel

Education

Carleton University – B.Eng in Computer Systems Engineering, Co-op

Sept 2021 – Apr 2026

Experience

Software Developer Student Co-op | Solace – Ottawa, ON Winter 2024, Fall 2024, Summer 2025

- Streamlined SVN to Git migration, cutting the process from a multi-week process to a single-day process
- Architected, implemented, and tested a new feature for the Solace Messaging API for C, preventing erroneous API states and saving bandwidth usage across multiple Solace messaging APIs
- Designed and unit tested a feature for the Solace Python API, enabling users to send compressed messages
- Led the migration and open-source release of the Wireshark SMF Plugin, improving community initiatives
- Built a workflow using GitHub Actions that creates plugin releases, reducing all friction through automation
- Won an internal hackathon by designing an AI chatbot for documentation

Full-Stack Developer Co-op | LearnExperts – Ottawa, ON Summer 2024

- XYZ: Accomplished X as measured by Y by doing Z: [article 1](#), [article 2](#)
- XYZ: Accomplished X as measured by Y by doing Z
- XYZ: Accomplished X as measured by Y by doing Z

Jr. Test Analyst Co-op | Immigration, Refugees, and Citizenship Canada – Ottawa, ON Summer 2023

- CAR: Challenge Action Result: [article 1](#), [article 2](#)
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Jr. Software Developer, High School Co-op | NorthStar Utilities – Ottawa, ON Winter 2020

- Start each bullet with a strong, past-tense action verb
- Having trouble coming up with content for your bullet points? Read these: [link 1](#), [link 2](#), [link 3](#), [link 4](#)
- Each bullet point should be 1–2 lines long and max 1 sentence long. Use Quillbot, LanguageTool, and Hemingway Editor to help you paraphrase and shorten them
- Don't let bullets spill onto the next line with only 1–4 words on it, it's a huge waste of space
<https://imgur.com/QCcZ792>

Projects

Wallpaper Theme Converter notneelpatel.xyz/WallpaperThemeConverter

- The more work experience you have, the less relevant outside-work projects tend to become
- If you have something that really stands out, consider listing it here

AI Raspberry Pi Bamboo Plant <https://github.com/NotNeelPatel/lucky-bamboo-ai>

- Only list real projects, not mandatory school projects or trivial tutorial projects found online
- Something that someone uses to solve a problem
- Something that has users (can be just you, as long as you use it often) and is actively maintained and not just rotting in a GitHub repo, never to see a PR for the rest of its life

Project Title blog.com/projectname

- Resume checklist: <https://old.reddit.com/r/EngineeringResumes/wiki/checklist>
- Google Docs version of this template:
https://docs.google.com/document/d/1MBvhATv8y-ES0RopRoLSZ3f3HjkM_Qa_f8fIHAEqgnI/edit

Projects

- **QuantSoftware Toolkit:** Open source Python library for data analysis and machine learning for finance
- **GitHub Visualization:** Data visualization of Git Log data using D3 to analyze project trends over time
- **Recommendation System:** Music and movie recommender systems using collaborative filtering on public datasets
- **Mac Setup:** Book that gives step by step instructions on setting up developer environment on Mac OS

Skills

Languages: Python, Java, C, C++, ARM Assembly, Verilog, BASH, HTML, CSS, JavaScript

Project Management: Git, SVN, Jira, Confluence

Hardware/Embedded: Vivado, FPGA, Raspberry Pi, Arduino

Other Tools: GitHub Actions, Jenkins, Roo/Cline, Wireshark, Testing Frameworks, GDB