

Anh Hoang Nguyen's Resume

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Introduction

I'm a Bachelor of Computer Engineering student at Concordia University in Montreal, QC.

I actively work on modern web applications, APIs, and frameworks and machine learning research projects in natural language processing. As an avid adopter of new and exciting cloud, server, and networking technologies, I setup my home lab and cloud clusters on Linode, AWS, and manage orchestration via Ansible. My tentative endgame is to work in DevOps and CyberSec.

Skills

- **Programming Languages:** C, C++, C#, Python, JavaScript, HTML/CSS, TypeScript, Java.
- **Specializations:** Web app development, cross-platform with Electron, server orchestration and networking.
- **Environments:** Linux, macOS, Windows and respective CLI's.
- **Tools:** Agile process, git, bash/zsh, PowerShell, vim, vscode, conda, OSINT framework.
- **Natural languages:** vi-vn (native), en-us/ca/uk (bilingual), fr-ca (B1), ja-jp (N5), de-de (casual).
- **Personal:** Professional manner, responsible, problem solving, willing to learn, a team player, empathetic, friendly.

Education

Bachelor of Computer Engineering with Co-op (2020 — 2024)

Concordia University, Montréal, QC.

- Relevant courses: Object-oriented Programming, Data Structures & Algorithms, Computer Organization & Software (assembly programming), Discrete Math, Technical Writing and Communications

DEC in Pure and Applied Sciences (2017 — 2020)

John Abbott College, Ste-Anne-de-Bellevue, QC.

- Relevant courses: Linear Algebra, Statistics & Probability

Experience

Software Developer in SCM/DevOps — Internship (5/2022 — 9/2022)

Genetec Inc., Saint-Laurent, QC.

- Maintain and update the installation program scripts (InstallShield)
- Create an assistance library for the installation programs in C#/C++
- Maintain and update compilation scripts for the compilation servers
- Create C# extensions for the Build Team Foundation library
- Improve the team's intranet page
- Design and add functionalities for the team's intranet page (ASP.NET): list and management of builds, reports, etc.
- Develop the installation script of a tool intended for our partners (InstallShield)
- Analyze different virtualization tools allowing execution of an application in a virtual environment, without having to install it in advance
- Develop a series of automated tests to be executed after each build of an application

IT Technician L2 — Part-time (3/2021 — now)

Academic IT Services, Concordia University.

- Offer frontline support to the customers in terms of utilizing the IT infrastructures, services, and resources at Concordia.
- Investigate complicate issues regarding physical systems, networking, internal accounts, and access controls to resolve or to escalate to SysAdmins and NetAdmins.
- Suggest insightful improvements for service desk work processes and cross-team communications.
- Regularly check the teaching lab peripherals (i.e., computers, monitors, projectors), and troubleshoot the found issues.
- Service the walk-in customer or in labs, and answering the phone call.
- Utilize the ticketing system to offer efficient IT support.
- Work in conjunction with full-time staff to ensure the functionality of computer labs.
- Perform inventory for new purchases (computers and equipment) by the engineering faculty.
- Undertake other job-related missions assigned by the manager of User Services.

IT Support Specialist — Internship (8/2021 — 12/2021)

Genetec Inc., Saint-Laurent, QC.

- Provide technical assistance and troubleshooting for users.
- Perform infra and team workflow improvement tasks.
- Test new hardware and software compatibility in the environment.
- Manage hybrid AD and Endpoint, account credentials and permission groups.
- Deploy IT assets: hardware and software.
- Utilize PowerShell and bash scripting.
- Manage cloud VMs and KVM/Hyper-V.
- Extensive use of Jira ticketing system and contribute to internal wiki.
- Handle IT phone calls.
- Maintain asset inventory and specifications. Troubleshoot computer hardware issues.
- Manage access request according to InfoSec policies.
- Work usually encompasses OSI layers 5 to 7.

Undergraduate Researcher — Casual (1/2021 — now)

SAC Research Group, Concordia University.

- I assist in researching practical applications of machine learning and deep learning models with current focus on explainable AI (XAI).
- I replicate experiments to verify claims arising during the research of a topic.
- I gather information from research literatures and extract meaningful points to aid in the research progress of the group.
- Previously, I contributed by running and reporting NLP models for classification on non-Latin datasets, more specifically XLNet and bert.

Systems Administrator — Contract/On-call (1/2021 — now)

Inertial Sensing Lab, Montreal, QC.

- Responsible for building and maintaining the project website.
- The website is a hub for both internal and public communications, functioning as a knowledge base, blog, archive, and file repository.
- I decide and implement from the tech stacks and the UI/UX design to the web hosting, networking, security, and identity & access management.

Notable Projects

Portfolio Site – <https://hoanganh.tech>

- Built with Nextjs framework for Reactjs.
- Custom styled and themed using MUI component library.

Unix Documentations – <https://unix.hoanganh.tech>

- My opinionated copy-paste unix documentations for tools, environment configurations, and out-of-the-box-experience setups on Linux/Unix-based distributions and operating systems.
- Built with Sphinx documentation framework.
- Automatically tested and deployed to a bare metal Debian VPS using GitHub Actions.
- Routed and SSL'd through Cloudflare.

Development Blog – <https://dev.hoanganh.tech>

- A blog built with Nextjs and Tailwind (hosted on Netlify with Github Actions CI) where I write about new techs, tools, and knowledge I come across through my everyday life.
- Routed and SSL'd through Cloudflare.

Data Object Parse and Meaningful Graph Traversal – <https://github.com/aaanh/meaningful-graph-traversal.git>

- Final project for 2nd level OOP course.
- Clean the Panama Papers .csv dataset using Python notebook and pandas.
- Parse the cleaned dataset using C++ into graphs and nodes.
- Output connections between nodes using BFS traversal.

Imaginary Homepage for ConUHacks VI – <https://halcyon.hoanganh.dev>

- Disclaimer: I am no longer affiliated with ConUHacks or HackConcordia.

- This project never saw the light of day due to sudden cancellations.
- Almost 2 months of work and improvements went out the window.
- Built using Next.js, MUI components and custom styling.
- Embedded with my own CTF-like web challenge (later stages not available because I shut down my development servers).