Anh Hoang Nguyen's Resume

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GitHub: https://github.com/aaanh

Introduction

I actively work on modern web applications, APIs, frameworks and machine learning research projects in natural language processing.

As an avid adopter of new cloud and networking technologies, I setup my home lab and cloud clusters on Linode, AWS, and manage orchestration via Ansible and k8s.

Professional Experience

Software Developer — Internship (1/2023 — 5/2023)

Nuance Communications + Microsoft, Montréal, QC.

> Healthcare AI solutions & services. Deep learning solutions in multiple industries.

- Core Technology R&D
- Develop backend API and microservices.

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

Genetec Inc., Saint-Laurent, QC.

> Hardware, software, and service provider in physical security, access control, and federated cloud-based security center.

- Completed 2 projects involving internal service migrations to on-premise Docker container cluster.
- Developed automated scripts for bulk requests with Azure DevOps API endpoints.
- Created and maintained software build and release pipelines for multiple target platforms: web app, native Windows, native Linux.
- Maintained and troubleshooted infrastructure incidents: Identity and Access Management, networking, OS performance.

Research Assistant — Casual (1/2021 — now)

SAC Research Group, Concordia University.

> Cloud architecture, system architecture, AI and ML applications research group

- My current project is to evaluate MLaaS platforms and develop an assessment framework.

- Assist in researching practical applications of machine learning and deep learning models with current focus on explainable AI (XAI).
- Replicate experiments to verify claims arising during the research of a topic.
- 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.
- Maintain and develop the group's website.

Full-Stack Developer — Contract (1/2021 — now)

Inertial Sensing Lab, Montreal, QC.

> Physics research lab specializes on inertial and mechanical operations using accelerometer sensors.

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

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

Academic IT Services, Concordia University.

> I.T. organization specialized in developing and servicing information systems for the Engineering and Computer Science school.

- 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.

Notable Projects

Portfolio Site – https://aaanh.ca

- Built with Nextjs framework for Reactjs.
- Custom-styled and themed with TailwindCSS.
- Implemented with API endpoints for Spotify play status.

Script Convenience Store – https://aaanh.app

- A repository for copy-pasting arcane commands on Linux, Windows, and macOS in case someone forgets.
- Built with Book.md framework running on Rust.
- CI/CD with Github Actions.
- Deployed on Vercel.

Personal Photo Reels – https://photos.aaanh.ca

- My straightforward photo reel of urban and natural landscapes
- Built with Nextjs, Tailwind CSS. Front-end and API hosted on Vercel. Asset storage and transformation API on Cloudinary. Cloudflare for caching, edge CDN, and DNS.

NAG-DevOps/speed-hpc - https://github.com/NAG-DevOps/speed-hpc

- Concordia University's HPC cluster.
- Develop Latex to HTML build pipeline for the documentation.
- Create battery-included devcontainer environment for authoring LaTeX.
- Create GitHub Actions pipeline for deploying the HTML docs.

Development Blog – https://ml.aaanh.com

- A blog built with Nextjs and Tailwind CSS (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.

Personal URL Shortener - https://s.aaanh.ca

- A simple URL shortener in Nextjs.

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.

Education

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

Concordia University, Montréal, QC.

DEC in Pure and Applied Sciences (2017 — 2020)

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

Skills

- **Programming Languages**: C, C++, C#, Python, JavaScript, HTML/CSS, TypeScript, Java.
- **Specializations**: Full-stack web development, IAM, cloud-sec, DevSecOps/SRE, containerization
- **Environments**: Linux, macOS, Windows and respective CLI's.
- **Tools**: Agile process, git, bash/zsh, PowerShell, vim, vscode, conda, OSINT framework.
- **Cloud Services**: Google Cloud Platform (functions, firebase, gke, compute-engine, Vertex), AWS (SageMaker, EC2), Azure (AAD, ADO)
- **Infra Tools**: Ansible, Terraform, k8s, qemu, VMWare Sphere, Hyper-V
- **Natural languages**: vi-vn (native), en-us/ca/uk (bilingual), fr-ca (B1), ja-jp (N5), de-de (casual).
- **Personal**: Professional manner, responsible, great analytical mindset, willing to learn, team player, empathetic.

Awards

- FRQNT Stipend Recipient, October 2020, for work in Inertial Sensing Lab under Prof. Larnder.

Other Interests

- Music, cultural exchange, travelling.
- Messing around with Awesome Selfhosted.
- Gaming.