Louis Nguyen

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Education

University of Guelph **Expected: April 2029**

Bachelor of Engineering, Engineering Systems and Computing *Guelph, Ontario*

- **GPA: 3.84/4.0**, **2x** Dean's List, Recipient of **$1000** Entrance Scholarship
- **Relevant Coursework:** Programming, Web Design and Development, Software Design, Statistics, Linear Algebra

Technical Skills

Languages: Python, C, JavaScript, HTML, CSS, SQL, Bash
Technologies/Frameworks: React, Node.js, Tailwind CSS, Bootstrap, PostgreSQL, REST APIs, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Vite, Vercel
Developer/Design Tools: VS Code, Git, GitHub, GitLab, Anaconda, Jupyter Notebook, Android Studio, Linux, Adobe After Effects, DaVinci Resolve, ChatGPT, Claude, Cursor, Sublime Text

Work Experience

Linamar Corporation **May 2025 – Present**

Senior CNC Machine Operator *Guelph, Ontario*

- Achieved a production output of **114%** by operating **4 lathes**, each producing **900+ Ford 8F pinions** per shift.
- Improved part production by **15%** by increasing machine **feed rates**, reducing cycle times from **35.3** to **22.4 seconds**.
- Trained an **inexperienced** operator to operate **4 CNC lathes**, achieving full independence within **two weeks**.
- Calibrated **5** different **measurement instruments** with tolerances as tight as **±0.02mm** for quality compliance.
- Collaborated with **6 machinists** to coordinate workflow, communicate production goals, and verify part quality.

Linamar Corporation **July 2024 – August 2024**

CNC Machine Operator *Guelph, Ontario*

- Produced **450+ Chrysler sun gears** per shift by simultaneously operating **2 CNC lathes** and a **broach machine**.
- Ensured parts met tight tolerance standards of **±0.05mm** by managing and replacing **4+ tooling** and **inserts**.
- Increased machine cycle times by **20%** by adjusting **feed rates** and **spindle speeds** based on material conditions.
- Recorded part measurements in **Operator Data Sheets** using **Microsoft Excel** to track quality assurance processes.

Projects

Electron Collision Predictor | *Python, Scikit-learn, Pandas, Matplotlib, Seaborn, Anaconda* **July 2025**

- Built a **linear regression model** to predict electron collision outcomes using **Python**, **Pandas**, and **Scikit-learn**.
- Analyzed and visualized data trends with **Matplotlib** and **Seaborn** to support model accuracy and interpretability.

Air Quality Data Analysis | *Python, NumPy, Pandas, Matplotlib, Seaborn, Jupyter Notebook* **June 2025**

- Processed and analyzed **88,000+ rows** of city air quality index and pollutant data using **Pandas** and **NumPy**.
- Developed **data visualizations** using **Matplotlib** and **Seaborn** to analyze AQI patterns, trends, and comparisons.
- Implemented a modular **Jupyter Notebook** environment for reproducible **exploratory data analysis (EDA)**.

Personal Portfolio | *JavaScript, React, Tailwind CSS, HTML, EmailJS, Node.js, Vercel* **June 2025**

- Built a responsive portfolio using **React** and **Tailwind CSS**, ensuring a smooth experience on desktop and mobile.
- Integrated **EmailJS** to build a fully functional contact form, allowing visitors to ask questions, connect, and network.

FocusIn - GDSC Hacks 2025 | *JavaScript, HTML, CSS, Gemini API, Chrome Storage API* **May 2025**

- Developed a **Chrome extension** using **JavaScript**, **HTML**, and **CSS** to block user-defined websites, leveraging the **Chrome Storage API** to persist settings and improve focus and productivity by reducing time spent on distractions.
- Integrated the **Gemini API** to generate context-aware questions from user-uploaded **text files** or **PDF files**.

Gemify | *JavaScript, React, Bootstrap, HTML, CSS, Spotify API, Gemini API, Node.js* **May 2025**

- Built a responsive web app with **React**, **Bootstrap**, and **Spotify API** to display real-time album data by artist.
- Integrated the **Gemini API** to build an interactive **chat bot** that recommends songs or artists based on user input.

Job Vacancies in Canada Data Analysis | *Python, Pandas, Matplotlib, Seaborn, Agile, SDLC* **April 2025**

- Analyzed job vacancy data from **Statistics Canada** by processing large CSV files using **Python** and **Pandas**.
- Created **data visualizations** using **Matplotlib** and **Seaborn**, highlighting industry trends for actionable insights.
- Led **4-week sprints** using **Agile**, consistently meeting **project milestones** and achieving **100% on-time** delivery.