Louis Nguyen

226-929-8051 | lnguye25@uoguelph.ca | linkedin.com/in/louisnguyenn | github.com/louisnguyenn | louisnguyen.me

Education

University of Guelph

Bachelor of Engineering, Engineering Systems and Computing

Guelph, Ontario

Expected: April 2029

- 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 ± 0.05 mm 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, NumPy, 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.