

KRUTARTH GHUGE

Peterborough, Canada | krutarthghuge@alumni.trentu.ca | (753) 881-8120 |
[linkedin.com/in/krutarth-ghuge-67b611184/](https://www.linkedin.com/in/krutarth-ghuge-67b611184/) | github.com/kruzee07 | kruzee07.github.io/

SUMMARY

Data professional with 3+ years of hands-on experience spanning data analytics, data engineering, machine learning, and software development across fintech, oil & gas, education, and environmental science. Skilled in building data pipelines, transforming and analyzing complex datasets, and developing scalable software solutions to deliver actionable insights.

WORK EXPERIENCE

Neo Engineering Solutions

Software Engineer

Remote - Peterborough, ON

Sep 2026 – Present

- Developed and maintained AI-driven engineering software for the oil & gas industry across company repositories. Implemented software enhancements, data-processing functionality, and system improvements based on engineering requirements and GitHub issues.
- Diagnosed and resolved software defects and data-related issues through debugging, root-cause analysis, testing, and code improvements. Contributed to software architecture, refactoring, maintainability, reliability, and performance optimization.
- Followed Git-based development practices including branching, pull requests, code reviews, CI validation, and repository contribution standards. Maintained technical documentation and supported compliance, governance, and audit-readiness through development and repository evidence.

ReceivECO – A Fintech Startup

Data and Product Developer

Peterborough, ON

Jun 2025 – Dec 2025

- Built and launched a receipt tracking platform integrating OCR, bank APIs, and POS systems, serving web and mobile users across individual and SME segments. Designed go-to-market strategy and secured fintech partnerships, including integrations with QuickBooks for automated expense reporting.
- Ensured PCI DSS and PIPEDA compliance through end-to-end data encryption to achieve early-stage user adoption.

Trent University

Student Lab Demonstrator / Academic Assistant / Student Marker

Peterborough, ON

Sep 2023 – Apr 2025

- Lab Demonstrator: Delivered ML, data preprocessing, OOP, and algorithmic problem-solving instruction to 30+ students per session, evaluating lab work for statistical accuracy.
- Academic Assistant: Conducted workshops on algorithmic problem-solving, OOP, and mathematical modeling, grading with focus on code efficiency, logical reasoning, and accuracy.
- Student Marker: Assessed 200+ submissions across web development, algorithms, calculus, and computation, reviewing for technical correctness, ethical standards, and documentation quality.

Atria University

Data Analyst Intern

Bengaluru, India

Jun 2024 – Jul 2024

- Analyzed 5+ regional satellite datasets (Sentinel-5P, MODIS, Landsat) across 4 environmental indicators: NDVI, air quality (NO₂, CH₄), water quality, and land cover. Built automated geospatial ETL pipelines reducing data processing time by 50%, accelerating climate impact identification across precipitation and temperature variables.
- Delivered actionable insights on 3+ greenhouse gas concentrations to sustainability and policy research teams, supporting resource management decisions.

PROJECTS | <https://kruzee07.github.io/projects/>

ASL Recognition Neural Network | C++, OpenMP, MPI

- Built a parallelized neural network from scratch classifying 24 ASL sign classes across 27,000+ images, reducing training computation time via OpenMP shared-memory optimization with 92%+ accuracy.

U.S. Medical Insurance Costs — Data Analysis | Python, Excel

- Mined and analyzed 1,300+ insurance records to identify key cost drivers — age, BMI, smoking status, and region — producing visual dashboards with statistically validated correlations.

Database Design: Student & Alumni Job Outreach System | SQL

- Designed a normalized relational database (3NF/BCNF) with ER/UML diagrams, SQL triggers, and role-based access control, built to scale to 1M+ users for recruitment matching workflows.

SKILLS

Languages & Tools: Python, SQL, R, C#, Java, C++, HTML5, CSS3, PHP, Node.js, React

Data & ML: Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Jupyter, ETL, data preprocessing, model evaluation

Databases & BI: Microsoft SQL Server, SharePoint, Excel (advanced), Power BI, Tableau

Other: Git/GitHub, REST APIs, Linux/Unix, Agile/Scrum, OCR integration, geospatial analysis (Google Earth Engine), financial modelling, Google Cloud Platform (GCP), Microsoft Azure, feature engineering, data visualization

Certifications: Python Data Associate | Generative AI for Developers (Google) | Canadian Investment Funds Course

EDUCATION

Trent University – Bachelor of Science (Honours) Computer Science, Specialization in Data Analytics, Minor in Economics

Jan 2022 – Jun 2025