KRUTARTH GHUGE

Peterborough, ON, K9L1T1 (Willing to relocate) | krutarthghuge@gmail.com | (705) 977-8120 | LinkedIn | GitHub | Portfolio

Programming Languages: C#, Python, Java, C, R.

ML & AI Tools: NumPy, Pandas, scikit-learn, Jupyter, TensorFlow/PyTorch, data preprocessing, model evaluation.

Web Development: HTML5, CSS3, SASS, PHP, Node.js, React. Database: SQL, Microsoft SQL Server, Microsoft SharePoint.

Other Technologies: Git/GitHub, Scrum & Agile Methodologies, Linux/Unix.

Certifications: Google IT Support Certificate, Canadian Investment Funds Course, Generative AI for Developers (Google).

Soft Skills: Excellent communication skills, team player, organized, problem-solving, serial expert, and easily adaptive.

WORK EXPERIENCE

Student Lab Demonstrator

Trent University

Peterborough, CAN

Jan 2025 - Apr 2025

Guided students in applying machine learning techniques, data preprocessing, and visualization during lab sessions.

• Evaluated lab work for analytical accuracy and proper use of statistical models in Data Mining courses.

Academic Assistant Sep 2024 – Apr 2025

- Conducted workshops on algorithmic problem-solving, OOP concepts, and mathematical modeling.
- Assisted in grading, focusing on code efficiency, logical reasoning, and accuracy.

Student Marker

Sep 2023 – Apr 2025

- Assessed assignments on web development, mathematical computation, calculus, and algorithmic logic.
- Reviewed submissions for technical correctness, ethical standards, and documentation quality.

Atria University Bengaluru, IND

Data Analyst Intern

Jun 2024 - Jul 2024

- Conducted exploratory and statistical analysis of satellite datasets from Google Earth Engine to examine environmental indicators like NDVI, air quality (CH₄, NO₂), water quality, and land cover, spanning multiple regions.
- Developed automated geospatial tools to process and visualize data trends, enabling a 50% improvement in efficiency for identifying climate impacts and resource management opportunities.
- Presented actionable insights on precipitation, temperature, and greenhouse gas concentrations, directly supporting
 policymaking and research on sustainable environmental practices.

Cyber & Forensics Security Solutions

Peterborough, CAN

Cyber Security & Ethical Hacking Intern (Remote)

Apr 2024 – Apr 2024

- Explored Python's capabilities to demonstrate live data processing and analysis through web frameworks like Flask, integrating backend functionality with an interactive front-end interface.
- Designed and implemented hashing techniques, including SHA-256, to secure user data inputs, ensuring cybersecurity best practices in data handling.
- Developed custom scripts and leveraged online tools to analyze and decrypt hashed codes, enhancing data validation and encryption knowledge.

Antardrishti Career Counselling Services and Psychometric Assessments

Mumbai, IND

Website Developer Intern

Nov 2020 – Oct 2021

- Designed and maintained a responsive, user-friendly website for Antardrishti, aligning with its career counseling goals and improving online engagement.
- Optimized website performance through SEO strategies, content updates, and bug fixes, increasing client inquiries and user satisfaction.

PROJECTS

Sign Language Recognition using Neural Networks - C++ with OpenMP and MPI

• Developed a custom parallelized neural network in C++ to classify ASL digits using the Sign Language MNIST dataset. Optimized training with OpenMP for faster computation while maintaining high accuracy.

United States Medical Insurance Costs - Data Analysis, Python, MS Excel

• Performed data analysis on the medical insurance costs dataset of the United States available from Codecademy, performing processes of mining, visualisation, analysis, and evaluation on the available dataset, and obtained key findings.

Hospital Information System (HIS) Upgrade for Peterborough Hospital - System Analysis, Healthcare Technology

 Created detailed requirements and use case analysis to upgrade Peterborough Hospital's HIS, targeting reduced wait times, automation in triage/scheduling, and improved billing accuracy. Designed a scalable, secure system aligned with healthcare standards.

EDUCATION

TRENT UNIVERSITY – Bachelor of Science Honours Computer Science, Specialization in Data Analytics, Minor in Economics Jan 2022 – Apr 2025

- GPA: 3.7 President's Honour Roll Awardee
- Dean's Honour Roll Awardee (2021-2022, 2023-2024).
- Relevant Coursework: Data Structures and Algorithms; Data Mining; Database Management Systems; Modelling and Simulation; Artificial Intelligence; High Performance Computing; Risk Management and Insurance; Financial Economics. References available upon request