Hien Le

Toronto, ON | (+1) 647 916-9668 | h11le@torontomu.ca | LinkedIn | GitHub | Portfolio

EDUCATION

Toronto Metropolitan University (TMU) **Toronto, ON, Canada**

- Bachelor of Science (BSc) in Computer Science Graduated June 2024
  - GPA: 3.84 / 4.33 ; Award: Dean's List 2021, 2022, 2023, 2024

TECHNICAL SKILLS

- **Machine Learning/Statistics:** LLMs (Large Language Models), Tumor Detection, Binary Patch Classification, Survival Analysis, Statistical ML (Forests, SVMs), Deep Learning (RNNs, Autoencoders, CNNs, GANs, Transformers), Transfer Learning (Densenet, EfficientNet, Multi-instance Learning), NLP, Data Mining, Feature Extraction/Engineering
- **Software Tools:** R, Python (TensorFlow, Keras, Pytorch, Sklearn) (4+ yrs experience), SQL (NoSQL, MySQL, BigQuery) (3+ yrs), Data (Tableau, PowerBI) (2yrs), Linux/Unix Shell Scripting (3+ yrs), MATLAB (4+ yrs), Java, Git, Javascript, React, Swift, OpenGL, C/C++
- **Cloud platforms/Container technologies:** Google Colab, AWS, Jupyter Notebook; Docker, Kubernetes

WORK EXPERIENCE

Research Assistant **May 2023 - Present**

- *IAMLAB - Biomedical Engineering - Dr. April Khademi (PI)* **Toronto, ON, Canada**
  - Applied advanced machine learning models in Python and MATLAB to train tumor detectors among breast cancer, achieving a 15% improvement in model accuracy through data processing techniques such as augmentation and color normalization.
  - Conducted in-depth research on the biomarker HER2 classification methodologies, demonstrating versatile expertise in digital pathology, statistical analysis, and model evaluation to solve complex problems.
  - Optimized database efficiency and data accessibility. Prepared detailed technical documentation and presented research findings. Ensured clear communication of complex analytical results, facilitating informed decision-making.
  - Transformed and pivoted raw data into meaningful visualizations using advanced dashboard tools (e.g., Tableau, Power BI), significantly improving the monitoring and reporting of key performance indicators (KPIs).
  - Collaborated with prestigious institutions, such as the University Health Network (UHN), to acquire over 500 raw data samples, demonstrating a proactive approach to data acquisition and effective stakeholder management.

Data Analyst Intern **May 2022 - September 2022**

- *HT General Clinic - Medical and Healthcare* **Lam Dong, Vietnam**
  - Queried and analyzed large datasets comprising over 700 patient records weekly using SQL, reorganized data in Excel, and utilized PivotTable for pattern analysis, contributing to a 25% increase in patient acquisition strategies.
  - Automated routine database maintenance tasks with Task Scheduler (Windows), reducing manual labor by over 20 hours per week and allowing the reallocation of resources to other strategic initiatives.
  - Developed a predictive analytics model to forecast patient visit trends and market performance of comparable services, resulting in a potential 15% increase in monthly revenue through improved strategic planning.
  - Collaborated with a team of four database management professionals to ensure the integrity and security of healthcare databases, implementing rigorous quality assurance protocols that reduced data entry errors by 20%.
  - Generated detailed reports on database performance and trends using Tableau, providing actionable insights that increased operational efficiencies by 12% and supported successful cost-cutting measures.

Database Administrator **November 2021 - April 2022**

- *Mathnasium - Math Learning Center* **Toronto, ON, Canada**
  - Developed a comprehensive system for real-time updates on employee survey responses related to operational processes, enhancing project oversight and reducing decision-making time by 50%.
  - Led efforts to maintain and optimize database operations, increasing data management efficiency by 10%.
  - Utilized VLOOKUP functions for data cleaning and to streamline scheduling processes, saving 90% of scheduling time.
  - Integrated a new student management system with the database network, boosting workflow efficiency by 200%.
  - Managed all aspects of database design, data backup, and disaster recovery planning, ensuring the reliability, security, and availability of educational data for continuous support of learning initiatives.

PROJECTS

World Happiness Report: https://github.com/h11le/World-Happiness-Report

- Analyzed the raw open-source World Happiness Report dataset represented in Excel file using R and ShinyApp, examining factors influencing global happiness levels including annual GDP, social support, health life expectancy, etc.
- Utilized ggplot2 and Plotly for creating interactive and dynamic visualizations to understand happiness determinants

TMU Classified: https://github.com/v-likithan/tmu-classified

- Developed a React web platform designed to facilitate classified advertisements within the TMU community, enabling users to buy, sell, or trade goods and services, utilized MongoDB to oversee ads, users, site settings, and chat repositories
- Conducted unit tests using testing frameworks (i.e., Jest and React Testing Library), resulting in robust code coverage