JEN (HA) NGUYEN
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ACADEMIC AWARD

- **3rd Prize – 7th National Big Data Health Science Conference 2026:** Data Hackathon
- **1st Prize – US IT National Collegiate Conference 2025:** Database Design & Machine Learning Contest
- Visionary Award 2025– Association for Business Information Technology Students 2025

EDUCATION

Missouri State University, School of Engineering and Applied Science Missouri, USA
Master of Science of Data Science, GPA: 4.0/4.0
- Valedictorian Scholarship

Missouri State University, School of Business Missouri, USA
Master of Business Administration (Minor: Finance and Data Analysis), GPA: 4.0/4.0
- Valedictorian Scholarship | Beta Sigma Honor Society

Hoa Sen University Vietnam
Bachelor Degree of Economics, GPA: 3.6/4.0
- Outstanding Student Scholarship | Dean's List

Artificial Intelligence (AI) Vietnam Institution Vietnam
AI Engineer and Data Science (DS) associate degree

EXPERIENCE

Machine Learning Engineer Intern | Coulomb Technology Remote, USA | Jan 2026 – Present
- Led end-to-end a tree-based regression pipeline using Python to be identified how material characteristics affect battery performance, increasing energy capacity from 100–120 to 135 mAh/g, saving over $1M in battery manufacturing costs.

Data Analyst Intern | CoxHealth Missouri, USA | Jun 2025 – Aug 2025
- Performed ETL and visualized 05 years of phone call center and execution data using SQL, DAX model and Power BI to identify the call center call center workload, enabling data-driven workforce planning and saving $100K annually.
- Processed 11M+ physician unstructured text messages using SQL, PySpark, Pytorch and large language models (BERT) to extract radiology procedure requests.
- Analyze modality demand–capacity trend by Time Series Analysis and visualize through Power BI dashboards to identify root causes of patient backlogs and revenue leakage, unlocked $1M+ in incremental revenue and reduced patient backlog by 50%.
- Automated 300+ recurring ServiceNow reports with PowerBI to help the IT leadership team make informed business decisions which increased operational efficiency by 5% for the operation department.
- Connected Microsoft Copilot to ServiceNow on Power BI dashboards, enabling AI-assisted self-service reporting and executive-level IT performance insights.
- Developed a scalable ETL pipeline on Microsoft Fabric using PySpark and SQL to efficiently process 10TB+ of distributed HDFS data, reducing cloud computing costs by 40% and supporting ServiceNow-integrated reporting.

Graduate Research Assistant | Missouri State University Missouri, USA | Aug 2024 – Present
- Led economic research on investment behavior of 200+ Gen Z and Millennial respondents using logistic regression (scikit-learn) and statistical analysis in R to inform financial literacy policy.
- Supported faculty-led economics research by designing regression models and clustering techniques in R to analyze COVID-19 impacts on customer behavior in the Midwest U.S.
- Analyzed and designed reports and dashboard using Power BI to visualize 2000+ student performance in 05 years, class effectiveness and professors 'feedback for Department Head making informed college decisions.
- Developed and deployed a scalable web application on AWS using EC2, S3, and RDS, resulting in a 30% increase in competition website traffic and improve student's experience.
- Led and taught undergraduate-level coursework in Power BI, Statistics, and Management Information Systems, integrating statistical theory, machine learning modeling, and applied analytics for research and industry use cases.
- Mentored 30+ students in Statistics, Python and R for data competitions, coaching machine learning model optimization that led to multiple hackathon awards.
- Award: Research presenter at the Einhellig Interdisciplinary Forum; Graduate Assistantship Awards Nominee 2026.

Senior People Analyst | *Home Credit B.C* Ho Chi Minh, Vietnam | Mar 2022 – Jul 2023
- Collaborated with cross-HR functional team to develop and maintain HR analytics databases, data warehousing on Workday, reporting system, automated 100+ HR reports and a 50% in turnaround time.
- Extracted and analyzed Workday HR data using SQL across talent acquisition, employee exit survey, technology headcount planning, and competency performance assessment to diagnose bottlenecks in the technical hiring process and workforce shortage.
- Integrated internal workforce data with graduate talent-pool insights from top universities to identify skill gaps and root causes of slow hiring for technical roles.

- Developed gradient-boosting regression models to forecast employee tenure based on engagement and performance data, improving headcount planning accuracy by 80% and saving $100M in corporate staffing costs.
- Designed and led a targeted apprenticeship program, increasing the senior-level talent pipeline by 20–30% and achieving a 100% conversion rate of interns to full-time employees.
- Owned end-to-end hypothesis-driven A/B tests on recruitment websites and candidate communications that increased applicant volume by 20%, reduced attrition costs by 12%, and improved candidate Net Promoter Score (NPS) to +70.
- Led end-to-end 360° feedback programs for senior and mid-level leaders, partnering with HR Business Partners and directors to drive action plans, visualize execution progress on Power BI, and reduce management-related exit survey drivers by 30%.
- Led end-to-end Voice-of-Employee and DEI programs, partnering with HR and leadership to deliver surveys, training, and engagement initiatives with 100% participation, increasing employee satisfaction by 20%, expanding DEI champions by 50%, and achieving the highest DEI survey scores.
- Owned engagement and DEI analytics, integrating survey data with HRIS and BI dashboards to track KPIs, identify engagement risks, and guide action planning; informed inclusive benefits redesign and recruitment policy updates through data-driven insights.
- Recognized with "The Best DEI Projects" award by the Nordic Chamber of Commerce for delivering data-driven engagement and inclusion programs with measurable business and employee impact.
- Recognition: Global DNA STARs Award (2022)

AI Researcher | AIMA Research Institution Remote, USA | Nov 2024 – Present

- Conducted systematic literature reviews and co-authored research papers targeting Q1 journals and top-tier conferences; collaborated with institutional AI researchers to publish technical blogs for the Vietnamese AI community.
- Designed and validated deep learning pipelines (ResNet34) for detecting mediastinal abnormalities on chest X-rays, applying advanced preprocessing techniques (pixel normalization, percentile clipping, CLAHE, MONOCHROME1 inversion) to improve diagnostic performance.
- Built end-to-end medical imaging classification experiments, incorporating 2D/3D feature extraction, 5-fold cross-validation, and multi neural network models.
- Collaborated with radiologists to semi-supervise annotation of 1,000+ MRI scans using 3D Slicer and engineered radiomics features to support imaging biomarker discovery.
- Led extensive feature selection and model benchmarking studies, evaluating 10+ feature importance methods and 16+ ML/DL models (including ResNet variants, DiffMIC-v2, and 3D CNNs) for benign–malignant tumor classification; achieved AUC = 0.903 and enabled radiologists to reduce diagnostic decision time by 50%.

PUBLICATIONS

- **Radiology Society of North America Conference (Poster):** OASIS-Net for Obstetric Adversarial Semi-Supervised Segmentation of Cervical and Fetal Head Ultrasound Imaging.
- **Springer Nature Journal (Under review):** MediRad-MRI: AI-Driven Radiomics Classification of Anterior Mediastinal Tumors on MRI (Author list: Minh H. N. Le; **Ha L. T. Nguyen**; Thanh-Huy Nguyen; Hien Q. Nguyen; Tuan Vinh; Nguyen Linh Thoai; Tan Duc Vo; Nhi H. H. Le; Thanh Vy Tran; Min Xu; Ulas Bagci; Thi Mai Thuy Tran; Nguyen Quoc Khanh Le)
- **Diagnostics Journal (Under review):** Leveraging Large Language Models for Automated Extraction and Phenotyping of Abdominal Aortic Aneurysm from Radiology Reports (Authors: Praneel Mukherjee, Ryan C. Lee, Roham Hadidchi, Sonya Henry, Michael, Coard, Matthew Davis, Yossef Rubinov, **Ha Nguyen-Luong**, Leah Katz, Tim Q Duong)
- **ICME Conference (Under review):** SO-LoRA: Sparse Orthogonal LoRA for Parameter-Efficient Continual Learning

CERTIFICATE

- **Lean Six Sigma Practitioner -** Dr. Mikel J Harry Six Sigma Management Institute Asia 2021
- **SQL Associate (Exam SQ501P)** – DataCamp (https://www.datacamp.com/certificate/SQA0010873285945) *Data Management in PostgreSQL, Exploratory Analysis in PostgreSQL (6-hour proctored assessment; high proficiency demonstrated.*
- **Mathematics for Machine Learning and Data Science** – DeepLearning.AI (https://coursera.org/share/03b2e09d9ff0b00fce1ca8572675a206)
- **Snowflake - SnowPro Core Certification** *(In progress)*