

Gina Nguyen

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EDUCATION

Colby College, Waterville, ME, USA, **Bachelor's Degree**

Graduating May 2026

Major: Computer Science & Economics **Minor:** Statistics

Major GPA: 3.95/4.0

Relevant Coursework: Statistical Modeling, Probability, Advanced Machine Learning, Neural Networks, Interpretable AI, Computer Vision, Financial Technology

WORK EXPERIENCE

Data Science Intern

June - September 2025

VPBank

- Analyzed and processed **5M+** customer records to develop a **deep-learning** Credit Card Approval model, predicting profiles with high-likelihood of successful registration and fund disbursement, boosting the estimated approvals by **10%**
- Conducted exploratory data analysis (EDA) and feature engineering utilizing **SQL** and **Big Data Query** tools, trained advanced **AI techniques**—including DeepGBM and SAINT— achieving **7.5%** lift in prediction accuracy, and deployed the optimal solution on **AWS SageMaker**
- Designed presentation and delivered project defense using **PowerBI** to **10+** executive business analysts and stakeholders
- Researched advanced applications such as AI-based risk scoring and fraud detection, collaborating with senior data scientists

Data Analytics Intern

June 2024 - current

Greentech Vina

- Consolidated and engineered **10M+** international trade records across **90+** countries on Ziploc and Zipper bag products leveraging **Python** and **Databricks**, enabling scalable data pipelines for distribution optimization and market forecasting.
- Performed trend and pattern analysis with **Tableau** dashboards to identify anomalies, price shifts and key customer segments for data-driven decision-making, contributing to a projected **15%** increase in engagement rates
- Explored **reinforcement learning** (Markov Decision Processes) to simulate supply chain resolutions, improving predictive accuracy for product demand by **12%**.

AI Engineering Intern

December - February 2024

Vietnam Academy of Science and Technology

- Architected a proof-of-concept **computer vision pipeline** to detect track pedestrians and vehicles in real-time using YOLOv8 implemented in **Python**, **OpenCV** and **PyTorch**, reaching **79%** mAP@50
- Integrated multi-object tracking (DeepSORT and BoT-SORT) to maintain consistent object IDs under occlusion and dense crowds
- Developed an **analytics layer** to compute pedestrian counts, traffic flow ratios, and density heatmaps for smart-city applications

Math Teaching Assistant

September 2023 - current

Colby College

- Facilitated study sessions for **50+** students, effectively clarifying complex concepts in Linear Algebra and Calculus II
- Coordinated with faculty to grade and provide detailed, constructive feedback, ensuring accurate academic evaluation

PROJECTS

FutureProof: Bankruptcy Detection | [Github](#)

December 2024

- Constructed predictive models to estimate bankruptcy risk for **~7,000** companies using financial performance metrics
- Applied **scikit-learn**, **PCA**, **Seaborn**, and **SHAP** to conduct EDA, feature engineering, data and results visualization, model behavior interpretation and feature importance
- Optimized **Logistic Regression** and **tree-based models** (XGBoost, Random Forest, SVM, and LightGBM), achieving **>90%** precisions
- Deployed an interactive dashboard leveraging **Streamlit** to predict bankruptcy and highlight **top 5** financial risk indicators

ColbyMerchandise: Campus e-commerce platform | [Github](#)

September - December 2025

- Built a full-stack **Flask** marketplace for campus community with a team of **4** software engineers, delivering **17+** production-ready features including authentication, real-time chat, order workflows, browsing and semantic search
- Utilized **HTML**, **CSS** and **Javascript** for frontend and established a **CI/CD pipeline** with automated testing by **pytest** to achieve **95%+** branch coverage before deploying to Heroku
- Leveraged **RESTful APIs** backed by dual-database setup, involving **SQLite** for local development and **PostgreSQL** for deployment

TECHNICAL SKILLS & INTERESTS

Technical Skills: Python, (SciPy, Pandas, NumPy, SHAP), SQL (Hive, Spark), R, AWS

Data & Statistical Tools: Predictive Analytics, Big Data Query, Tableau, PowerBI, Databricks, Snowflake

Machine Learning: PyTorch, Tensorflow, PCA, SVM, Model Evaluation, Deep Learning, Reinforcement Learning