SHUBHAM GOYAL

📞 (857) 370-1627 | Boston, MA | ✈ goyal.shubh15@gmail.com | in [Linkedin](#) | 🌐 [Portfolio website](#)

EDUCATION

Northeastern University, Boston, USA	GPA: 3.6/4.0

Masters of Science in Information Systems (Computer Software Engineering)   *Sep 2022 – May 2024*

Relevant Courses: Big Data & Intelligent Analytics, Neural Modeling (Deep Learning), Network Science

Indian Institute of Technology (IIT) Kharagpur, India	GPA: 7.5/10.0

Integrated Bachelor of Science, Master of Science in Geophysics   *Jul 2014 – May 2019*

WORK EXPERIENCE

Verato Inc	McLean, VA

Data Science Intern - Bayesian Modeling   *Jun 2023 – Aug 2023*

- Developed and evaluated a probabilistic model for imputing missing data values in personally identifiable information
- Enhanced individual profile-matching algorithm leveraging bipartite graph networks and gradient boosting models

American Express	Bengaluru, India

Assistant Manager (Data Science), Global Collections   *Nov 2021 – Aug 2022*

- **Xgboost for Defaulter Collections:** Spearheaded re-development of collections model to rank order highly collectible defaulters using Xgboost attaining ∼15% Gini uplift in benchmark metrics with ∼$1.2MM benefit in collections
- **External Vendor Validation:** Validated external vendor risk-attributes by fine-tuning in house production models and comparing credit-default prediction performance
- **High-Balance default case study:** Adjudged best presenter for in-depth analysis and default preventing recommendations, resulting in saving ∼$400K exposure at default

Analyst (Credit Risk Strategy), US Commercial limits   *Nov 2019 – Nov 2021*

- **Proactive Limit Increase Strategy:** Recognized as Analyst of the Quarter for leading first corporate portfolio campaign- 400+ clients received a total increment of ∼$73MM resulting in 11% increase in Y-o-Y spending
- **Bank-based Underwriting:** Collaboratively launched a Platform Capability for corporate portfolio with an incremental annual PTI impact of ∼$2MM, by systematically integrating bank statements with underwriting platforms.
- **Low-Risk Underwriting Strategy:** Re-designed strategy for small businesses setup for risk assessment, with an expected incremental spend impact of ∼$20MM annually and loss save of $0.2MM. Executed a 6-month A/B test pilot to formalize strategy, partnering with engineering and compliance teams to execute a phased solution

SKILLS/TECH STACK

Programming: Python | SQL | PySpark | R | C++ | AWS | GCP | Docker | Airflow | Tableau | FastAPI | NetworkX
Data Science: Machine Learning | Deep Learning | Statistical Modeling | NLP | Time Series | Tensorflow | PyTorch

PROJECTS

LES Weather Forecasting: Multi-Modal Architecture (Git)   *Neural Modeling Project, NEU*

- Developed a classic Encoder-Decoder architecture using ConvLSTM and LSTM for weather forecasting at Lake Michigan
- Used satellite images and meteorological data to create the model attaining a recall of 0.85 on highly imbalanced data

TravelBud: AI Tool for Travel planning (Git)   *Big Data Project, NEU*

- Developed a travel itinerary-generating application optimized based on user areas of interest, budget, and destination
- Leveraged RapidAPI for flight, hotels data, and OPENAI GPT3 for chat completion coupled in a cloud ecosystem

Founder - GrocerEase: AI-Based Digitization of Groceries (Pitch Deck) *Husky Startup Challenge, NEU*

- Addressed a prevalent problem of forgetfulness and provided an efficient way to digitize purchases by just scanning receipts
- Ranked in Top-5 finalists in the startup incubator competing among 20 other startups for $10K seed funding

DIME Network Analysis: Study of US Political Contributions (Git)   *Network Science Project, NEU*

- Researched DIME data to formulate a network among the monetary contributions in US Federal Elections
- Leveraged network science principles to showcase scale-free properties, and ideology-based communities among contributors

VaniVerse (Git)   *Big Data Project, NEU*

- VaniVerse is a conversational AI platform that can be used to generate prompts for a given audio file
- OPENAI Whisper & GPT API are leveraged to process audio files and generate prompts simultaneously using Airflow