Veom Nemade

Web Portfolio: www.veomn.com

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EDUCATION

The University of Texas at Dallas, Dallas, TX — Expected May 2026
Bachelor of Science in Software Engineering — Major Core **GPA 3.63**

Relevant Coursework: OOP, Algorithms, Data Structures, Machine Learning, Full Stack Development, Networking (Socket Programming), Data Science, Bioinformatics

TECHNICAL SKILLS

- **Programming Languages**: Python, Go, Java, JavaScript, C, C++
- **Data Science / Machine Learning:** Pandas, NumPy, Scikit-Learn, TensorFlow, XGBoost, Biopython, PCA & clustering, Statistical Modeling
- **Bioinformatics:** BLAST parsing, DNA/FASTA processing, GC/ORF/codon-usage analysis, Gene-expression matrix analysis, Sequence alignment metrics
- **Visualization:** Matplotlib, Seaborn, Plotly, Heatmaps, PCA plots, Clustering visualizations
- **Tools:** Git, Jupyter, VS Code, AWS, Google Cloud
- **Web Development:** React.js, Go APIs, Node.js, Express.js, PHP, HTML, CSS, JSON
- **DevOps & Cloud:** Docker, AWS, Google Cloud, CI/CD fundamentals
- **Databases:** MongoDB, MySQL
- **System Design:** RESTful API development, Microservices architecture, ETL pipelines, Data-pipelines
- **Financial Analytics:** Excel financial modeling, Data Analysis, Dashboard Creation
- **AWS Tools:** AWS Kinesis, AWS Lambda, AWS Glue (ETL & DQ), Redshift, S3 Bucket, Athena, PySpark, QuickSight, CloudWatch, VPC, IAM

Soft Skills: Effective communication, critical thinking, problem-solving, collaboration and teamwork.

EXPERIENCE

Data Science & Machine Learning Intern @ Rove — **Jan 2025 – August 2025**

- Built a multi-sheet financial analytics model (GMV, take rate, redemption cost, partner payouts) to quantify unit economics and identify high margin vs. loss-making scenarios.
- Analyzed partner and redemption datasets to compute revenue/cost per mile and produced data-driven insights that guided pricing and strategy decisions.
- Designed scenario-analysis tools and dashboards that modeled how changes in redemption rate, partner pricing, and take rate impact profitability and overall business performance.

Technical Skills: Excel financial modeling (GMV, take rate, unit economics), revenue/cost analysis, partner-pricing modeling, scenario forecasting, dashboard creation.

API & Platform Team Member @ UTD Nebula Labs | Github — **Jan 2024 – August 2024**

- Participated in Agile practices including daily stand-ups, sprint planning, and peer code reviews to drive project success.
- Automated extraction and transformation of UTD course data using web scraping, structuring data with an optimized MongoDB schema for efficient querying.
- Developed Go-based RESTful APIs with features like advanced filtering, caching, and secure authentication, enhancing API performance and security.

Technical Skills: Go APIs, MongoDB, React.js, JSON, Agile Scrum

CERTIFICATIONS

- Data Science Certification - The University of Texas at Dallas
- Neuro-Net Math - The University of Texas at Dallas
- AWS Certified Cloud Practitioner (Credentials)
- Google Cybersecurity – Coursera (Credentials)
- JavaScript Algorithms and Data Structures – FreeCodeCamp (Credentials)
- Machine Learning with Python – FreeCodeCamp (Credentials)
- Fullstack GoLang React: Design to Reality – Udemy (Credentials)
- AWS Data Engineer Certification – In Progress

BIOINFORMATIC COURSES

- Bioinformatics Specialization – UC SanDiego University (Coursera)
- Genomic Data Science Specialization – Johns Hopkins University (Coursera)

CAMPUS INVOLVEMENT

Hack UTD, The University of Texas at Dallas, Dallas, TX May 2023
Developed solutions for real-world challenges in a collaborative hackathon setting.

UTD Nebula Labs, The University of Texas at Dallas, Dallas, TX Jan 2023- 2025
Contributed technical expertise and innovative ideas in software projects.

PROJECTS

Real-Time Customer Behavior Analytics Pipeline (AWS)
Built scalable real-time data pipeline for continuous event processing and insights. Cut event-to-dashboard latency to under 2 minutes. Approach: Designed full architecture: Kinesis → Lambda → S3 → Glue Crawler → Glue ETL → Glue DQ → Redshift → QuickSight.

Churn Guard | Github
Developed a Python/Scikit-Learn predictive analytics platform for customer churn, improving accuracy by 15% through advanced preprocessing and model tuning, and analyzed large datasets to generate insights that informed client retention strategies. Approach: Feature engineering + outlier detection --->Logistic Regression, Random Forests, XGBoost --->hyperparameters to maximize predictive score --->ROC-AUC, precision-recall.

AI-Powered Retrieval-Augmented Generation (RAG) System Github
Build an offline AI system for secure, collaborative insight. Reduced API cost by 100% through offline inference and improved retrieval accuracy using hybrid graph + vector search. Approach: Designed a full RAG architecture using Microsoft GraphRAG, integrated AutoGen agents, ran local LLMs through Ollama and Lite-LLM, and built an interactive Chainlit UI.

BLAST Result Parser (Bioinformatics Tool) Github
Built a Python-based BLAST parser with chainable filters, standardized alignment fields, summary and top-hit extraction, and multi-format exports—cutting manual analysis time by 80%. Approach: Parsed XML/tabular BLAST with Biopython --->Chainable filtering pipeline ---> statistics computation.

DNA Analysis Toolkit (Comprehensive Sequence Analysis) Github
Built an end-to-end DNA analysis toolkit for students and researchers **featuring** GC-content profiles, ORF maps, codon-usage heat-maps and supported batch analysis for 1,000+ FASTA sequences. Approach: FASTA parsing & standardized structure → GC, ORF, codon usage, translation pipelines →Memory-efficient batch workflows

VeomShopping.com | Github
Built and deployed a full-stack educational e-commerce platform using Go, ReactJS, and MongoDB; designed secure, scalable RESTful APIs, optimized responsive UI, and configured NGINX for load balancing and SSL from domain setup through final deployment.