SIMRAN KARAMCHANDANI
U.S. Citizen
svkaramchandani@gmail.com | (201) 786-3665
https://linkedin.com/in/skaramchandani | https://github.com/simkaramchandani01

OBJECTIVE

Data Analytics Engineer in biotech industry, leveraging analytics and visualizations to optimize workflows, improve decision-making, and drive measurable value in business transparency and operational efficiency. Seeking opportunities to address business challenges through digital solutions and data-driven strategies.

SKILLS & SYSTEMS

- Data Analytics: **Databricks**, ETL, Data Cleansing, Exploratory Data Analysis, Data Mining, Data Modeling
- Systems: **n8n Automation**, **Agentic AI**, CrewAI, Tableau, **Power BI**, **Power Apps**, Veeva Vault QMS, LIMS, MES
- Programming: **SQL, Python**, R, **LLM**, MATLAB/Simulink, Linux Bash, Java
- Project Management: **Jira**, **Confluence**, Yellow Belt Six Sigma & Green Belt Six Sigma Certified, Agile Scrum
- Machine Learning Algorithms: Regression, Classification, Clustering, Gradient Boosting, XGBoost, LightGBM

WORK EXPERIENCE

Takeda Pharmaceuticals, *Lexington, MA*   Jul 2025 – Present
Data Visualization & Analytics Engineer, Data Digital & Technology (DD&T)

- Developed and deployed **Power BI** dashboards and **Power Apps** solutions across 5+ functions, reducing manual data handling by 40% and enabling real-time site performance tracking for global and site leader visibility.
- Led the **Digital Community of Practice** by organizing and presenting 9 lunch-and-learn presentations to the site to strengthen digital maturity and promote AI awareness and engagement.

Vertex Pharmaceuticals, *Boston, MA*   Jan 2022 – Jul 2025
External Manufacturing Operations Senior Specialist, Type I Diabetes (T1D)   May 2024 – Jul 2025

- Developed an interactive **Power BI** dashboard to track commercial manufacturing batch disposition TAT across contract organizations (CDMOs), identifying slowest performing assays and record completions.
- Resolved 95% of CDMO production issues within target timelines through cross-functional quality management.

Manufacturing Operations Specialist (Shift Lead), Type I Diabetes (T1D)   Feb 2023 – May 2024

- Improved Manufacturing efficiency by 30% through delivery of a **Power BI** dashboard tracking shift KPIs.
- Led shift operations, delegated personnel responsibilities, and acted as SME for process operations and event triage.

Manufacturing Operations Senior Scientific Associate, Type I Diabetes (T1D)   Jan 2022 – Feb 2023

- Supported tech transfer to new facility via material readiness and execution of qualification runs.

EDUCATION

- **University of Chicago**, M.S. Applied Data Science, **GPA:** 3.97/4.0   Jul 2023 – Jun 2025
- **Northeastern University**, M.S. Chemical Engineering, **GPA:** 3.7/4.0   Aug 2021– Dec 2022
- **Syracuse University**, B.S. Bioengineering and Neuroscience, **GPA:** 3.5/4.0   Aug 2017– May 2021

PROJECTS

University of Chicago   Jul 2023 – Jun 2025
Lease-to-Own Pricing Strategy (Capstone): Won "Best in Show" in Winter 2025 Capstone Showcase

- Built a **predictive model** using customer behavior and financial patterns to identify which approved applicants were most likely to sign a lease, driving **data-informed pricing strategies**.

Generative AI:

- Developed multimodal chatbot that returns product information and displays relevant product images based on user queries, leveraging text and image processing with **TorchVision**, **CLIP embeddings**, and Facebook AI Similarity Search **(FAISS)** for similarity search and retrieval from vector storage.
- Built **CrewAI** resume tailoring tool to parse job descriptions and auto-tailor resumes to role requirements.

Predictive Modeling & Data Analytics:

- Developed Machine Learning (ML) models in **Python** to assess Type II Diabetes risk, analyze audio features for music success, and predict gym membership churn based on user behavior.