DEVANSHU KHADKA

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EDUCATION

University of Chicago — Chicago, IL
MS in Applied Data Science — Sept 2025 – Dec 2026

Virginia Tech — Blacksburg, VA
BS in Computer Science & Computational Modeling and Data Analytics — Aug 2020 – Dec 2024

EXPERIENCE

University of Chicago — Chicago, IL
Graduate Research Assistant – Biomedical Data Science — Sept 2025 – Present
- Developing end-to-end Python pipelines for high-plex spatial proteomics, performing data preprocessing, feature extraction, PCA, and Leiden clustering using Scanpy on Midway3 HPC
- Optimized and benchmarked pipeline parameters (neighbors, principal components, resolution) to assess clustering stability, runtime, and reproducibility
- Generated analytical figures, heatmaps, and summary reports to visualize results and support downstream biological interpretation

Berkley Alternative Markets Tech — Manassas, VA
Software Engineering Intern — Jun 2024 – Dec 2024
- Automated 15+ Katalon workflows to validate data outputs across Guidewire claim and check modules
- Utilized K6 API scripts to call multiple GraphQL endpoints and validated GraphQL response fields matched defined schema contracts

EZOPS Inc — Blacksburg, VA
DevOps Intern — Jun 2023 – Aug 2023
- Built internal AWS control tooling for 20+ EC2 and RDS instances to standardize environment setup for engineering and analytics teams
- Worked within Bitbucket Pipelines and Jira workflows to support standardized deployment and task tracking across cross functioning teams

Virginia Tech — Blacksburg, VA
Undergraduate Teaching Assistant — Jan 2023 – May 2023
- Assisted 50+ students in Python fundamentals, debugging practices, and algorithmic problem solving

PROJECTS

Crash Rate Prediction from Traffic Volume Data — Sep 2024 – Dec 2024
- Built a machine learning pipeline to predict roadway crash rates from traffic volume inputs, performing feature engineering and TensorFlow model training
- Deployed the model into a web application where authenticated users could upload data and generate predictions through an interactive interface

Parish Data ETL & Dashboard Analytics — Sep 2024 – Dec 2024
- Automated multi-stage extraction of parish data from diocesan websites using Python (Playwright + BeautifulSoup), producing structured CSV outputs across multiple dioceses
- Cleaned and standardized scraped results into analytic tables and visualized engagement patterns in a Power BI dashboard for downstream analysis and insight generation

Certificates / Achievements

- **Amazon:** AWS Solutions Architect – Associate, AWS Certified Cloud Practitioner, AWS Certified AI Practitioner
- **Microsoft:** Microsoft Azure Data Fundamentals
- **Hackathons:** Grand Champion – VT CMDA Data Competition

SKILLS

Languages	Python, R, Java, SQL, C, MATLAB, DAX, HTML/CSS, Groovy, Kotlin
Tools & Frameworks	Numpy, Pandas, Scikit-Learn, Tensorflow, XGBoost, Spark, Matplotlib, GraphQL, Hive, React
Software & Cloud	PowerBI, Tableau, Git, Google Cloud, AWS, Azure, JIRA, SageMaker, Excel
Management	Agile, Scrum, Stakeholder Engagement, Design Thinking, Cross-functional collaboration
Modeling & Analytics	Clustering, Regression modeling, Time-series forecasting, A/B Testing, Statistical inference