

Omar Madjitov Cover Letter

December 25, 2025

Dear Hiring Manager,

I am applying for data and machine learning-focused roles where analytical rigor, engineering judgment, and real-world impact matter. I am a graduate student in Computer Science at **Georgia State University** with a strong focus on applied machine learning, data pipelines, and decision-oriented analytics.

My work consistently sits at the intersection of messy data and operational clarity. I enjoy taking imperfect datasets, identifying what is actually learnable, and building systems that produce reliable, explainable results.

One representative project involved a full geospatial and transactional analysis of retail revenue. I engineered an end-to-end pipeline from raw accounting exports into normalized relational tables, recovered customer geolocation with multi-stage validation, and used clustering diagnostics to derive six operational sales territories. The result was a clear territorial structure that captured approximately **75% of total revenue** in a single core region and revealed actionable demand patterns through seasonal decomposition.

In another project, I worked on a medical imaging dataset originally framed as a segmentation problem. By auditing the labels, I identified a fundamental mismatch between the annotation structure and the modeling task. I reframed the problem as single-class object detection, built a reproducible YOLOv8 pipeline, and achieved **mAP@50 of 0.905** with consistent localization performance. This experience reinforced the importance of choosing the correct modeling abstraction before optimizing metrics.

Alongside my data science work, I have built production-grade systems. I led development of a full-stack application that combined authenticated APIs, SQL analytics, and external job-feed ingestion into a single dashboard. The project emphasized reliability, clear data ownership, and deployability rather than experimental complexity.

Across projects, my approach is consistent: understand the data-generating process, validate assumptions early, and design pipelines that others can reason about and extend. I am comfortable collaborating with engineers and non-technical stakeholders, presenting results clearly, and iterating quickly when requirements change.

I am seeking a role where I can contribute to applied machine learning and analytics work that supports real operational decisions, while continuing to grow as an engineer and data scientist. I would welcome the opportunity to discuss how my background could support your team's goals.

Sincerely,

Omar Madjitov
Atlanta, GA
omadjitov1@icloud.com
(404) 396-7397
github.com/workoholyguy