

Ally Financial

Fraud Transaction Monitoring Dashboard

Ally Financial, headquartered in Detroit, Michigan, is a technology-driven bank holding company. Ally provides auto financing, digital banking, mortgage services, and consumer lending to their millions of members.

The shift towards online financial services complicates the already difficult process of detecting unusual transactions. To effectively monitor banking fraud, analysts spend hours combing through transaction data to flag suspicious trends or data.

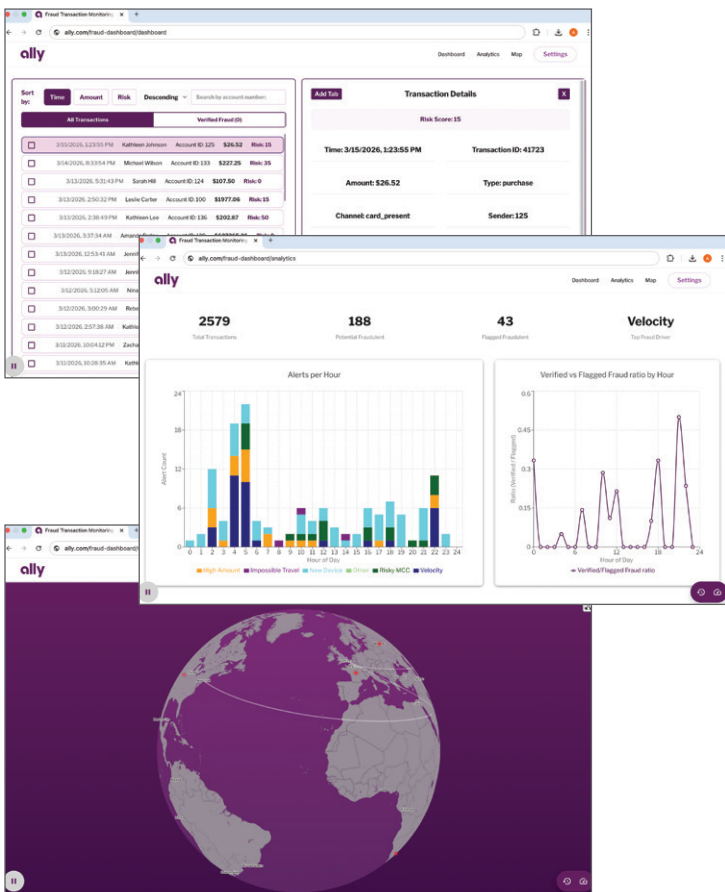
Our Fraud Detection Monitoring Dashboard automatically identifies potential fraud in real time. Each flagged transaction is assigned a risk score and provides a plain-language explanation of the factors that triggered the alert, giving analysts a head start.

Ally analysts review a transaction page that brings together key details in one place, including account history, merchant information, device details, time, and location. A short summary is generated for the analyst that explains why the transaction is marked suspicious. Analysts manually review the information, add comments and make final determinations directly in the dashboard.

To support workflows, our system helps analysts sort and filter alerts and compare similar transactions, focusing on the highest-risk activity first. Our system contains both an analytical view, showing the broad trends in the set of transactions, and a table view, which facilitates studying individual transactions, giving analysts an easy way to monitor both the fine-grained and overall fraud activity.

This tool reduces the effort needed by Ally analysts to identify fraud, and helps teams document decisions, saving time and money.

The front end is implemented in React, TypeScript, JavaScript, and Tailwind CSS. The back end is implemented in Python using the Flask web framework with PostgreSQL for relational data storage. The system uses Ollama to support AI-powered analyses.



Ally Student Members

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