

# FINAL TEAM STRUCTURE & RESPONSIBILITY MAPPING

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## 1. Richa Sinha + Mohit Ranjan — ML Engineers

### Primary Ownership (Non-Negotiable)

```
[ AI / ML CORE ]
├─ Feature Engineering Logic
│   ├── Offline feature computation
│   ├── Feature validation & contracts
│   └─ Feature correctness
│
├─ Model Development
│   ├── PyTorch models
│   ├── XGBoost / LightGBM models
│   ├── LLM fine-tuning (HF Transformers)
│   └─ Model evaluation & metrics
│
├─ Explainability
│   ├── SHAP
│   ├── LIME
│   └─ Model confidence scoring
│
└─ Model Quality
    ├── Bias detection
    ├── Drift definitions
    └─ Performance baselines
```

### Tools She Owns

- PyTorch
- Hugging Face Transformers
- XGBoost / LightGBM
- Feast (feature definition layer only)

- SHAP / LIME
- Python ML stack

## 2. Satyajit + Mohit — Python Engineers

### Primary Ownership

```
[ DATA + AI SERVICES ]
├─ Data Pipelines
│   ├── Kafka consumers
│   ├── Stream processing logic
│   └─ Batch data jobs
│
├─ AI Service Layer
│   ├── FastAPI inference APIs
│   ├── Feature retrieval APIs
│   └─ Model invocation wrappers
│
├─ Integration Layer
│   ├── Feature Store access
│   ├── Object storage access
│   └─ Model registry access
│
└─ Async Processing
    ├── Redis Streams
    ├── Retry logic
    └─ Backpressure handling
```

### Tools He Owns

- Python 3.11
- FastAPI
- Kafka client logic
- Redis Streams
- Feast (online feature access)
- S3 integration
- Model inference glue code

# Mohit Ranjan — Systems / DevSecOps / Platform Engineer

This is where the backbone lives.

## Primary Ownership

[ PLATFORM, INFRA & GOVERNANCE ]

└─ Kubernetes Platform

|   └─ Cluster setup

|   └─ Workload isolation

|   └─ Resource scheduling

|   └─ Autoscaling

|

└─ Streaming Infrastructure

|   └─ Kafka / Redpanda

|   └─ Topic strategy

|   └─ Reliability & replay

|

└─ ML Platform

|   └─ Kubeflow

|   └─ Model Registry

|   └─ KServe

|   └─ Triton Inference Server

|

└─ Workflow Engines

|   └─ Apache Airflow

|   └─ Temporal

|

└─ Security & Governance

|   └─ Keycloak (OIDC, RBAC)

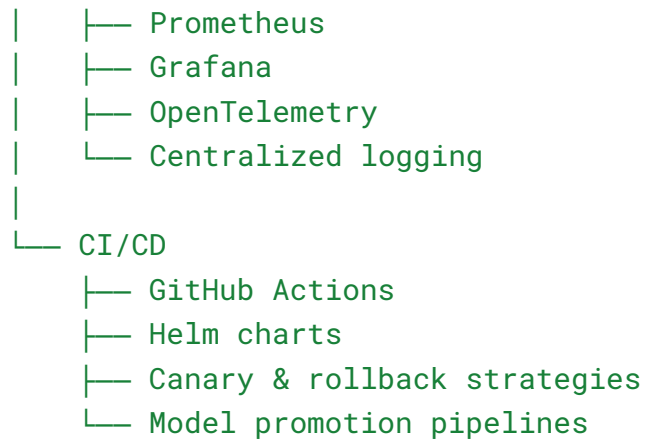
|   └─ HashiCorp Vault

|   └─ Policy-as-Code (OPA)

|   └─ mTLS & secrets

|

└─ Observability



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#### [ DECISION INTELLIGENCE ]

- Model output interpretation
- Threshold & confidence calibration
- Rule-model arbitration
- Safe-fail logic

Primary: Richa (logic correctness)

Enforcement: Mohit (policy & runtime)