Project Planning Phase

Product Backlog, Sprint Schedule, and Estimation

Sprint No.	Duration (Weeks)	Start Date	End Date	Goals / Deliverables	Estimation (Person-Days)	Notes
Sprint 1	2	2025-04-16	2025-04-29	Requirement analysis, environment setup, data collection	10	Setup network data capture tools
Sprint 2	2	2025-04-30	2025-05-13	Data preprocessing pipeline, feature engineering	12	Develop scripts for feature extraction
Sprint 3	3	2025-05-14	2025-06-03	Initial AI model development (classical ML baseline)	15	Train/test Random Forest, SVM
Sprint 4	3	2025-06-04	2025-06-24	Deep learning model design and prototyping	18	LSTM/CNN models for anomaly detection
Sprint 5	2	2025-06-25	2025-07-08	Integration of detection engine with real-time data stream	14	Connect models with data pipeline
Sprint 6	2	2025-07-09	2025-07-22	Alerting system and dashboard UI prototype	12	Setup notification and visualization
Sprint 7	2	2025-07-23	2025-08-05	System testing, performance tuning, and documentation	12	Test for false positives, optimize speed

Sprint 8	1	2025-08-06	2025-08-12	Final deployment and user training	8	Deploy system and train users

Sprint No.	Start Date	End Date	Milestone Description	Deliverables
Sprint 1	2025-04-16	2025-04-29	Project initiation, environment & data setup	Data capture setup, requirements doc
Sprint 2	2025-04-30	2025-05-13	Data preprocessing pipeline ready	Scripts, sample processed data
Sprint 3	2025-05-14	2025-06-03	Baseline AI models trained and validated	Classical ML models, evaluation report
Sprint 4	2025-06-04	2025-06-24	Deep learning models developed	Trained DL models, codebase
Sprint 5	2025-06-25	2025-07-08	Detection engine integrated with streaming data	Real-time detection prototype
Sprint 6	2025-07-09	2025-07-22	Alerting and dashboard prototype completed	Alerts system, UI mockups
Sprint 7	2025-07-23	2025-08-05	System testing and optimization completed	Test results, performance tuning
Sprint 8	2025-08-06	2025-08-12	Final deployment and user training	Deployed system, training docs