

## **FinTech:**

### **Problem Statement 1: Explainable & Cross-Platform Fraud Intelligence**

Financial fraud increasingly involves coordinated activities across multiple platforms such as banks, digital wallets, and e-commerce systems, while most existing fraud detection solutions operate in isolation, detect fraud only after losses occur, and provide little explanation for their decisions. The challenge is to design an AI-powered fraud intelligence system that proactively detects early-stage fraudulent behavior by correlating user activities across platforms, identifying coordinated fraud networks using graph-based learning, and generating clear, human-readable explanations for every flagged transaction to enable transparent, trustworthy, and timely fraud prevention.

### **Problem Statement 2: Fair & Explainable AI Credit Scoring**

Traditional credit scoring models heavily rely on historical credit data, excluding thin-file and no-credit users and often reinforcing algorithmic bias while offering limited transparency in decision-making. The challenge is to build a fairness-aware AI credit scoring system that uses alternative behavioral and transactional data to assess creditworthiness, actively detects and mitigates bias, produces explainable credit decisions, and allows lenders to dynamically balance risk and fairness, thereby promoting inclusive, transparent, and responsible lending.

### **Problem Statement 3: Evidence-Grade Blockchain Supply Chain**

Most blockchain-based supply chain solutions focus on traceability but fail to ensure data authenticity, legal admissibility, and real-world verification, as they primarily store claims rather than verifiable proofs. The challenge is to design an evidence-grade blockchain supply chain system that records cryptographic proofs instead of raw data, integrates physical verification methods such as QR codes, images, or IoT signals, supports legally verifiable audit trails, and enables selective data disclosure to ensure transparency, privacy, and scalability.

## **FoodTech:**

### **Problem Statement 1: AI-Driven Food Inflation & Price Volatility Prediction System**

Food price inflation and sudden volatility pose serious risks to food security and economic stability, yet existing forecasting mechanisms often react only after prices surge. The challenge is to develop an AI-driven prediction system that analyzes crop yield data, climate conditions, market demand, storage availability, and transportation factors to accurately forecast future food price inflation and volatility, enabling policymakers and regulators to take timely, preventive actions.

### **Problem Statement 2: Satellite-AI-Driven Food Stock & Hoarding Detection System**

Artificial shortages caused by illegal stockpiling and hoarding significantly distort food markets and inflate prices, while traditional monitoring methods lack real-time visibility. The challenge is to build a system that leverages satellite imagery and AI analytics to detect abnormal food stock accumulation by analyzing storage patterns and correlating them with market price signals, generating early alerts for authorities to prevent hoarding and ensure fair food distribution.

### **Problem Statement 3: AI-Assisted Legislative Drafting & Impact Validation for Food Laws**

Food-related legislation often suffers from overlapping regulations, enforcement gaps, and unintended economic consequences due to limited data-driven evaluation during drafting. The challenge is to develop an AI-assisted system that analyzes existing food laws, identifies conflicts and compliance gaps, and simulates the real-world impact of proposed policy changes, helping lawmakers draft clear, effective, and evidence-based food regulations.

## **LegalTech:**

### **Problem Statement 1: AI + Blockchain-Based Bail Application System**

The bail application process is often slow, complex, and inaccessible for undertrial prisoners due to limited legal awareness, inconsistent interpretation of bail eligibility criteria, and heavy reliance on manual legal assistance, resulting in delayed filings and prolonged detention. The challenge is to develop a LegalTech solution that uses Explainable AI to analyze legal provisions, case facts, and precedents to provide clear and consistent bail eligibility guidance, while leveraging Blockchain technology to securely and immutably record bail recommendations and application histories, ensuring transparency, accountability, fairness, and timely access to justice.

### **Problem Statement 2: AI-Driven Legal Assistance and FIR Automation Platform for Citizens**

Many citizens in India face significant barriers in reporting crimes and registering FIRs due to limited legal awareness, complex legal language, stressful circumstances, and inconsistent FIR registration practices, often leading to poorly framed complaints, delayed justice, and loss of critical evidence. The challenge is to build a citizen-centric LegalTech platform that uses Explainable AI to convert real-world incident descriptions into legally compliant, structured FIR-ready complaints, while transparently guiding citizens on applicable legal sections, mandatory FIR provisions, rights, and evidence requirements to improve access to justice and trust in the legal system.

### **Problem Statement 3: AI-Driven Accident Liability & Fault Assessment System**

Determining legal liability after road traffic accidents is a time-consuming and disputed process that relies heavily on manual reports, witness statements, and subjective interpretation of traffic laws, causing delays in insurance claims, compensation, and legal proceedings. The challenge is to develop an AI-driven LegalTech system that analyzes accident evidence and traffic regulations to assess fault and liability, provides clear and explainable reasoning for decisions, and supports faster, fairer, and more transparent post-accident legal and administrative outcomes.

## **HealthTech:**

### **Problem Statement 1: AI-Based Healthcare Eligibility Verification System**

Patients are often required to share complete medical records to prove eligibility for healthcare services such as insurance claims, subsidies, or clinical trials, exposing sensitive personal and medical data to privacy breaches and misuse. The challenge is to develop an AI-based eligibility verification system that can accurately validate patient eligibility while minimizing data exposure, ensuring privacy-preserving access to healthcare services and strengthening trust in digital health ecosystems.

### **Problem Statement 2: Bio-Guardian – A Decentralized & Intelligent Patient Privacy Shield**

Healthcare data is predominantly stored in centralized hospital systems that act as high-value targets for cyberattacks and insider misuse, leaving patients with little visibility or control over who accesses their medical records. The challenge is to design a decentralized and intelligent patient privacy platform that securely tracks and controls healthcare data access, provides tamper-proof audit trails, resists phishing and insider threats, and empowers patients with transparency and control over their medical data.

### **Problem Statement 3: Cyber-Resilient & Explainable AI for Transparent Organ Allocation**

Current organ transplant systems face a significant trust and security gap due to opaque matching decisions, vulnerability to cyberattacks, and slow manual processes that fail to account for real-time medical constraints such as organ viability timelines. The challenge is to build a cyber-resilient organ allocation system using Explainable AI that transparently justifies matching decisions, incorporates real-time clinical parameters, and ensures secure, tamper-proof handling of transplant data to improve fairness, trust, and life-saving outcomes.