

# 30 AI/ML Projects for FinTech

*Author: Aniakwa Nathan*

## Fraud & Security

- **Credit Card Fraud Detection:** Flag suspicious transactions.
- **Loan Application Fraud Detection:** Identify fake applications.
- **Anti-Money Laundering (AML):** Spot unusual money movement patterns.
- **Biometric Login:** Use voice or face for secure access.
- **Network Intrusion Detection:** Find hackers in system logs.

## Trading & Investing

- **Algorithmic Trading Bot:** Automate buy/sell decisions.
- **Stock Price Predictor:** Forecast short-term price movements.
- **Market Sentiment Analyzer:** Gauge mood from news/social media.
- **Portfolio Optimizer:** Suggest the best mix of investments.
- **Crypto Price Forecaster:** Predict Bitcoin/Ethereum trends.
- **Earnings Call Analyzer:** Summarize and score CEO speeches.

## Banking & Lending

- **Credit Score Predictor:** Estimate loan default risk.
- **Dynamic Credit Model:** Use alternative data for scoring.
- **Personalised Loan Offer System:** Recommend loan terms.
- **Automated Document Processing:** Extract data from bank statements.
- **Customer Churn Predictor:** Identify who might leave the bank.
- **ATM Cash Predictor:** Forecast cash demand at machines.

## Customer Experience

- **Financial Chatbot:** Answer customer questions automatically.
- **Personalised Investment Recommender:** Suggest stocks/funds.
- **Customer Value Predictor:** Calculate a customer's lifetime worth.
- **Smart Notifications:** Alert users to unusual spending.
- **Automated Spending Categoriser:** Sort transactions into categories.
- **Dynamic Insurance Pricing:** Set personalised insurance rates.

## Operations & Compliance

- **Invoice Data Extractor:** Automate accounts payable.
- **Financial Report Summarizer:** Create short summaries of long reports.
- **Compliance Monitor:** Scan emails for risky behaviour.
- **Expense Report Auditor:** Flag fraudulent employee expenses.
- **Trade Surveillance:** Detect illegal trading patterns.
- **Contract Analysis Tool:** Find key clauses in legal documents.
- **Regulatory Change Alert System:** Monitor for new financial rules.