## Hiring ML Interns | President's Office - Strategic Projects | Onsite (Bangalore)

We're looking for exceptional ML Interns to join the President's Office at Jupiter, focusing on strategic, high-impact projects across Al-driven product innovation and decision intelligence.

This isn't your typical internship. You'll create ML prototypes that directly influence product decisions, drive growth, optimize risk management, and enhance business intelligence—all while collaborating closely with senior leadership.

# Who We're Looking For:

- Proven hands-on experience in Machine Learning, LLMs, or NLP
- Strong coding skills in Python (familiarity with sklearn, PyTorch, or TensorFlow)
- Comfort navigating ambiguity, working with real-world data, and iterating rapidly
- High-agency individuals driven by ownership and passionate about solving meaningful, real-world challenges

### What You'll Gain:

- Direct exposure to strategic decision-making in the President's Office at Jupiter
- Opportunity to tackle open-ended ML challenges with significant business impact
- Competitive, top-of-market stipend
- Potential full-time role in Jupiter's AI team upon successful completion

Location: Jupiter HQ, Bangalore (Onsite) Duration: 3-6 months Stipend: 1L/month

# Internship Problem Statement: Predicting Change in Credit Score

**Objective:** Simulate a realistic dataset and build a machine learning model to predict whether a customer's credit score will **increase**, **decrease**, or **remain stable** in the next 3 months.

**Part 1: Create the Dataset** Generate a **synthetic dataset** with at least **25,000 rows**, simulating real-world customer credit behavior. Each row should represent a unique customer-month combination. Suggested features:

- customer\_id
- age, gender, location
- monthly\_income
- monthly\_emi\_outflow
- current\_outstanding
- credit\_utilization\_ratio
- num\_open\_loans
- repayment\_history\_score (0-100)

- dpd\_last\_3\_months (Days Past Due)
- num\_hard\_inquiries\_last\_6m
- recent\_credit\_card\_usage (last 3 months)
- recent\_loan\_disbursed\_amount
- total\_credit\_limit
- months\_since\_last\_default
- target\_credit\_score\_movement: increase, decrease, or stable

Design your target column based on logical heuristics. For example:

- High DPD + High Utilization + New Inquiries → Likely to decrease
- Low EMI/Income ratio + Good repayment score → Likely to increase

### Part 2: Train & Evaluate the Model

- Train a multi-class classification model
- Handle class imbalance with appropriate methods
- Evaluate with accuracy, F1-score, and class-wise recall
- Use explainability tools to highlight key drivers of credit score movement

#### **Bonus:**

• Propose product or policy interventions based on high-risk/high-opportunity segments your model reveals.

## **Submission Requirements:**

- .csv of generated dataset
- Jupyter notebook with code, EDA, and model
- Short readme or slide deck explaining your logic and business takeaways

Alloted Time: 4 days

**Note -** Feel free to make your assumptions and state that in your solution.