

FAST API

27.0.0.1:8000/docs#/default/predict_rate_predict_post

Loan Interest Rate Prediction API 0.1.0 OAS 3.1

/openapi.json

default

POST /predict Predict Rate

Parameters

No parameters

Request body Required

application/json

Edit Value | Schema

```
{ "loan_amnt": 15000, "annual_inc": 30000, "fico_range_low": 600, "fico_range_high": 700, "dti": 30.0, "delinq_2yrs": 1, "emp_length": 4, "purpose": "credit card", "term": " 36 months", "revol_util": 45.6 }
```

Execute Clear

Responses

Curl

```
curl -X 'POST' '\nhttp://127.0.0.1:8000/predict'\n-H 'accept: application/json'\n-H 'Content-Type: application/json'\n-d '{"loan_amnt": 15000,\n"annual_inc": 30000,\n"fico_range_low": 600,\n"fico_range_high": 700,\n"dti": 30.0,\n"delinq_2yrs": 1,\n"emp_length": 4,\n"purpose": "credit card",\n"term": " 36 months",\n"revol_util": 45.6 }'
```

127.0.0.1:8000/docs#/default/predict_rate_predict_post

Request URL

http://127.0.0.1:8000/predict

Server response

Code	Details
200	Response body ("predicted_interest_rate": 0.5) Download
	Response headers content-length: 31 content-type: application/json date: 12 Dec 2025 13:15:34 GMT server: uvicorn

Responses

Code	Description	Links
200	Successful Response Media type application/json Controls Accept header: Example Value Schema "string"	No links
422	Validation Error Media type application/json Example Value Schema ("detail": [{ "loc": ["string", "string"], "msg": "string", "type": "string" }])	No links

Schemas

HTTPValidationError > Expand all object

STREAMLIT



Loan Interest Rate Prediction App

Loan Amount

15000

- +

Annual Income

36000

- +

FICO Range Low

680

- +

FICO Range High

700

- +

DTI (Debt-to-Income Ratio)

12.50

- +



Delinquencies (Past 2 years)

1

- +

Employment Length (Years)

4

- +

Loan Purpose (must match dataset values)

credit_card

Term (e.g., '36 months')

36 months

Revolving Utilization (%)

45.60

- +

Predict Interest Rate

Predicted Interest Rate: 8.54%

FLASK

← → ⌂ 127.0.0.1:5000

Loan Interest Rate Prediction

Loan Amount

Annual Income

FICO Range Low

FICO Range High

DTI

Delinquencies in 2yrs

Employment Length (years)

Purpose

36 months



Revolving Utilization (%)

Predict

Predicted Interest Rate: 8.82%

GRADIO

127.0.0.1:7860

Loan Interest Predictor

Loan Amount 15000	Predicted Interest Rate (%) 8.63
Annual Income 36000	Flag
FICO Range Low 680	
FICO Range High 700	
DTI 12.5	
Delinquencies (2yrs) 1	
Employment Length 4	
Purpose credit card	
Term 36 months	
Revolving Utilization 45.6	

Clear

Submit