

LLM

dgm-ML

2025 6 4

Abstract

API LLM dgm-ML Groq Gemini LLM

1 introduction

1.1

ML ML AutoML

1.2

LLM ML ML ML

2

- : Python dgm-ML LLM API Groq, Gemini
- :
- : Titanic F1 ROC-AUC
- : LLM

3

- LLM **accuracy: 0.80, f1 extunderscore score: 0.72, roc extunder-score auc: 0.82**
- Groq LLM Llama
-

4

LLM ML AI Groq API Gemini

5

LLM

- J. Schmidhuber, "Evolutionary principles in self-referential learning", On Learning Algorithms and Neural Networks, 1987.
- OpenAI, "GPT-4 Technical Report", 2023.
- Groq Inc., "Groq API Documentation", <https://groq.com/>
- Google, "Gemini API Documentation", <https://ai.google.dev/>
- scikit-learn: Machine Learning in Python, <https://scikit-learn.org/>