

Model Card for AGTE 41 1: Precision Agriculture

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Model Card: Google Gemini 1.5 Flash - Pseudocode for Precision Agriculture software (Lab)

Model Details

Developed by: Google AI

Model type: Large Language Model

Version: 1.5 Flash

Last updated: 2024-10-09

- **Model Name:** Gemini 1.5 Flash
- **Model Type:** Transformer
- **Version:** 1.5 Flash 002
- **Release Date:** 2024-10-09
- **License:** Proprietary
- **Authors:** Google AI Research Team

Intended Use

- Gemini 1.5 Flash is designed for:
 - Natural language generation (articles, stories, scripts)
 - Code generation and translation
 - Educational assistance and research
 - Content creation and customer service

Usage Guidelines

- **Best Practices:**
 - Provide clear, specific prompts.
 - Verify outputs for biases/hallucinations.
 - Avoid sensitive data in prompts.
- **How to Cite:**

Google AI. (2024). Gemini 1.5 Flash [Large Language Model]. <https://ai.google/>

Training Data

- **Dataset(s):** Proprietary (books, articles, code repositories).
- **Data composition:** Diverse text/code across topics/languages.
- **Preprocessing:** Tokenization, normalization, bias filtering.

Performance and Limitations

Performance Metrics

- **MMLU (5-shot):** ~82% accuracy.
- **Code Generation:** 74% pass rate (HumanEval).
- **Translation:** 90%+ fluency score (human-evaluated).

Known Limitations

- Potential biases from training data.
- Occasional hallucinations.
- High computational resource requirements.

Ethical Considerations

- **Bias:** Gender/racial/cultural biases possible despite mitigation efforts.
- **Privacy:** Google may store interactions for improvement (opt-out available).
- **Environmental impact:** High energy use per query (~10x standard search).

Technical Specifications

- **Model Architecture:** Transformer-based (Mixture of Experts).
- **Parameters:** 1.25 trillion (estimated).
- **Context Window:** 2 million tokens.
- **Input:** Text (multimodal capabilities in other Gemini versions).
- **Output:** Textual responses.

Additional Information

- **License:** Proprietary (Google ToS).
- **Contact:** [Google AI Support](#).
- **API Access:** Available via [Google AI Studio](#).

Acknowledgements

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