

# Future Improvements for Translation Model

## 1. Enhanced Translation Quality

- Experiment with multiple LLM models (e.g., Claude, Llama, Deepseek)
- Implement a confidence scoring system for translations

## Quality Metrics

- Expand evaluation metrics to include:
  - BERTScore (Semantic similarity using contextual embeddings)
  - COMET (Crosslingual Optimized Metric for Evaluation of Translation)
  - Human evaluation integration

## 2. Performance Optimizations (for batch translation)

- Implement rate limiting and quota management
- Add cost optimization for API usage
- Implement smart retry mechanisms for failed translations
- Add support for fallback models when primary model is unavailable

## 3. Language Support

- Add support for more languages
- Implement regional dialect support

## 4. User Experience

- Implement user feedback collection
- Add support for custom terminology dictionaries
- Add API endpoints for external integration
- Implement webhook support for automated workflows
- Add support for different file formats (PDF, DOCX, etc.)