

Task-Specific Decoding Recommendations (2025)

| Task | Recommended Parameter | Why? |
|---------------------|-----------------------|--|
| Machine Translation | Beam Search | width=3-5 Deterministic, quality critical |
| Factual Q&A | Greedy / Low Temp | T=0.1-0.3 Single correct answer needed |
| Summarization | Beam Search | width=4 Balance coverage + conciseness |
| Code Generation | Greedy | T=0 Syntax errors costly |
| Creative Writing | Nucleus / Contrastive | p=0.9, α =0.6 Diverse but coherent |
| Dialogue Systems | Nucleus | p=0.85-0.95 Natural variation needed |
| Story Generation | Contrastive | α =0.5-0.7 Avoid repetition in long text |
| Long-form Articles | Contrastive | α =0.6, p=0.9 Degeneration prevention |

Task-Specific Decoding Recommendations (2025)