Contributing to Lycheetah × CASCADE

Thanks for your interest in improving this system! This is an open experiment in computational philosophy and semantic analysis.

🎯 Ways to Contribute

1. Break It (Most Valuable!)

- Find edge cases where detection fails
- Discover false positives/negatives
- Test on different writing styles
- Report unexpected behavior

How: Open an issue with:

- Example text that fails
- Expected vs actual results
- Your interpretation of why

2. Improve Detection

- Expand semantic word lists
- Suggest better thresholds
- Propose new metrics
- Optimize performance

How: Open a PR with:

- Clear explanation of improvement
- Test cases showing benefit
- Updated documentation if needed

3. Extend Functionality

- Add support for other frameworks
- Create visualization tools
- Build web interface
- Add new analysis dimensions

How: Open an issue first to discuss, then PR

4. Academic Analysis

- Critique methodology
- Suggest validation approaches
- Compare to existing techniques
- Propose formal evaluation metrics

How: Open an issue or discussion

🔧 Development Setup

```bash
# Clone repo
git clone https://github.com/yourusername/lycheetah-cascade.git
cd lycheetah-cascade

# Install dependencies
pip install numpy

# Run tests
python3 test_lycheetah_system.py

# Try the CLI
python3 lycheetah_cli.py config
```

📝 Code Style

- Keep it readable over clever
- Document complex logic
- Add tests for new features
- Follow existing patterns

No strict style guide - consistency matters more than rules.

🐛 Reporting Bugs

Good bug reports include:

1. **What you expected**: "Should detect this as Lycheetah content"
2. **What happened**: "Got LCS of 0.3, marked as unverified"

3. **How to reproduce**: Minimal example text
4. **Your environment**: Python version, OS

💡 Feature Requests

Open an issue describing:

- **Problem**: What need isn't being met?
- **Solution**: How would you solve it?
- **Alternatives**: Other approaches considered?

🔬 Testing Philosophy

This is research-grade software. We value:

- **Empirical validation** over theoretical perfection
- **Real-world testing** over synthetic benchmarks
- **Community feedback** over author assumptions
- **Iterative improvement** over complete solutions

📊 Adding Test Cases

If you have examples of:

- Authentic Lycheetah content
- Modified/paraphrased versions
- Similar but distinct frameworks
- Edge cases

Please share them! (Open issue or PR to `tests/` folder)

🤝 Code of Conduct

Be constructive:

- Critique ideas, not people
- Acknowledge limitations honestly
- Share knowledge generously
- Celebrate improvements

Be curious:

- Ask "why" before "wrong"
- Explore alternatives
- Learn from failures
- Build on others' work

Be open:

- All skill levels welcome
- Questions encouraged
- Experiments valued
- Diverse perspectives sought

📜 License

By contributing, you agree your contributions will be licensed under the same MIT License as the project.

🔥 Priority Areas

Current focus areas where help is most valuable:

1. **Threshold optimization** - Finding optimal detection boundaries
2. **Semantic expansion** - Better word lists for each axiom
3. **Validation methodology** - How to properly test this system
4. **Performance** - Speed and memory optimization
5. **Documentation** - Clearer explanations and examples

Remember: This system is an experiment in measuring philosophical coherence computationally. Perfect accuracy isn't the goal - useful insights are.

🔥 Let's build something interesting together 🔥