# **User Guide**

# **Getting Started**

# **Accessing the Application**

Once deployed, access the GREDs AI Reference Library at:

- Frontend: http://localhost:3000
- API Documentation: http://localhost:8000/docs

#### **Main Features**

#### 1. Dashboard

The dashboard provides an overview of:

- Total works ingested
- Total chunks indexed
- Active sessions
- Recent activity

#### 2. Repository Management

Navigate to **Repositories** to:

- View all ingested works
- Add new repositories
- View ingestion status
- Regenerate indexes if needed

# Adding a Repository:

- 1. Click "Add Repository"
- 2. Enter the GitHub URL
- 3. Provide a unique slug (e.g., "cosmology-hub")
- 4. Configure metadata (title, authors, tags)
- 5. Click "Ingest"

# 3. Query Interface

The **Query** page allows you to:

- Submit natural language questions
- View retrieved chunks
- See citation information
- Filter by tags or works

#### **Submitting a Query:**

- 1. Enter your question in the search box
- 2. Optionally filter by tags or specific works
- 3. Click "Search"
- 4. Review results with inline citations

#### 4. Knowledge Graph

The **Graph** visualization shows:

- Dependencies between works

- Citation relationships
- Concept clustering

#### 5. Session Management

The **Sessions** page allows you to:

- Create new sessions
- View active sessions
- Create checkpoints
- Rehydrate previous sessions

#### **Creating a Checkpoint:**

- 1. Navigate to your active session
- 2. Click "Create Checkpoint"
- 3. Provide a descriptive name
- 4. Checkpoint saved for later rehydration

#### 6. Verification Dashboard

The Verifier page displays:

- Recent verification runs
- Pass/fail statistics
- Failed claims for review
- Verifier performance metrics

#### 7. Audit Logs

The **Audit** page provides:

- Searchable audit trail
- Filtering by event type
- Download logs as JSON
- Compliance reporting

## **Best Practices**

# **Query Formulation**

- Be specific in your questions
- Use technical terms from your domain
- Reference specific concepts or papers
- Review multiple chunks for complete context

# **Session Management**

- Create checkpoints at major milestones
- Name checkpoints descriptively
- Rehydrate sessions when resuming work
- Review condensed summaries regularly

#### Citation Verification

- Always review partial/failed citations
- Update source documents if needed
- Use verifier feedback to improve queries
- · Monitor verifier thresholds

# **Troubleshooting**

## **Common Issues**

## Issue: Slow query responses

- Check if indexes are built
- Reduce top-K parameter
- Verify backend health

#### **Issue: Low verification scores**

- Review query formulation
- Check chunk quality
- Adjust verifier thresholds

## **Issue: Missing citations**

- Ensure work is fully ingested
- Check ingestion logs
- Regenerate indexes if needed

# **Support**

#### For additional help:

- Check the Architecture (architecture.md) documentation
- Review API Reference (api-reference.md)
- Submit issues on GitHub