```mermaid
flowchart TD
    A([User Query:
    neuromorphic papers]) --> B[Initialize State]
    B --> C[State = {
    user_query:
    'neuromorphic papers',
    papers: [],
    relevant_papers: [],
    summary: null,
    current_step: 'search'
    }]
    C --> D[Node 1:
    Search Papers]
    D --> E[State Update:
    papers = [50 results]
    current_step = 'filter']
    E --> F[Node 2:
    Filter Relevant]
    F --> G[State Update:
    relevant_papers = [10 filtered]
    current_step = 'summarize']
    G --> H{Conditional Logic:
    Papers > 5?}
    H -->|Yes
    10 papers found| I[Node 3:
    Summarize Results]
    H -->|No
    Less than 5 papers| J([END:
    Insufficient results])
    I --> K[State Update:
    summary = '...'
    current_step = 'complete']
    K --> L([END:
    Summary complete])
```

**User Query:** neuromorphic papers

**Initialize State**

State = {
user_query: 'neuromorphic papers',
papers: [],
relevant_papers: [],
summary: null,
current_step: 'search'
}

**Node 1: Search Papers**

State Update:
papers = [50 results]
current_step = 'filter'

**Node 2: Filter Relevant**

State Update:
relevant_papers = [10 filtered]
current_step = 'summarize'

**Conditional Logic: Papers > 5?**

Yes — 10 papers found

No — Less than 5 papers

**Node 3: Summarize Results**

**END: Insufficient results**

State Update:
summary = '...'
current_step = 'complete'

**END: Summary complete**