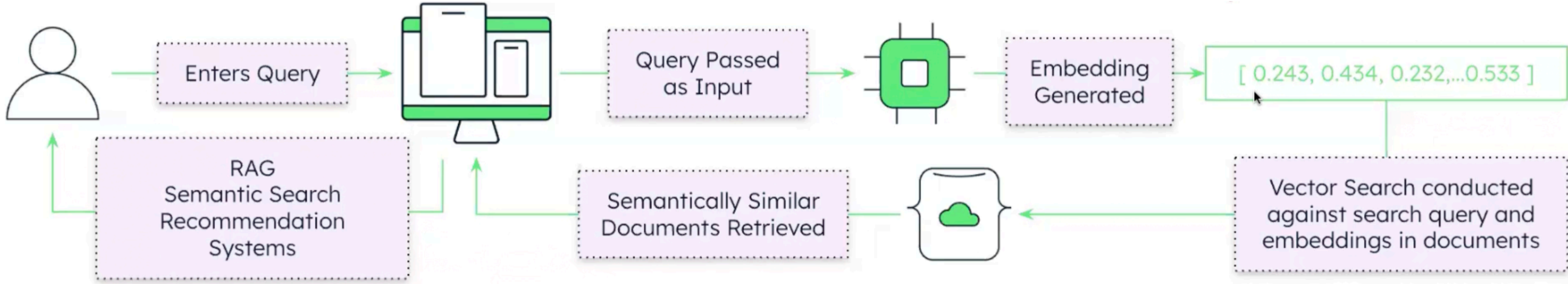


MongoDb Vector Search



“Teach me about artificial intelligence”

```
[ { "title": "Advanced Artificial Intelligence: Concepts and Applications", "author": "Sarah Johnson", "year": 2022, "score": 9.8 }, { "title": "Machine Learning and AI in Business", "author": "Michael Chen", "year": 2019, "score": 8.5 }, { "title": "The Future of Intelligence: Artificial and Beyond", "author": "Emily Rodriguez", "year": 2021, "score": 7.9 }, { "title": "AI in Healthcare: Revolutionizing Patient Care", "author": "Dr. Robert Williams", "year": 2020, "score": 7.2 } ]
```

Only in Atlas (soon premiss)



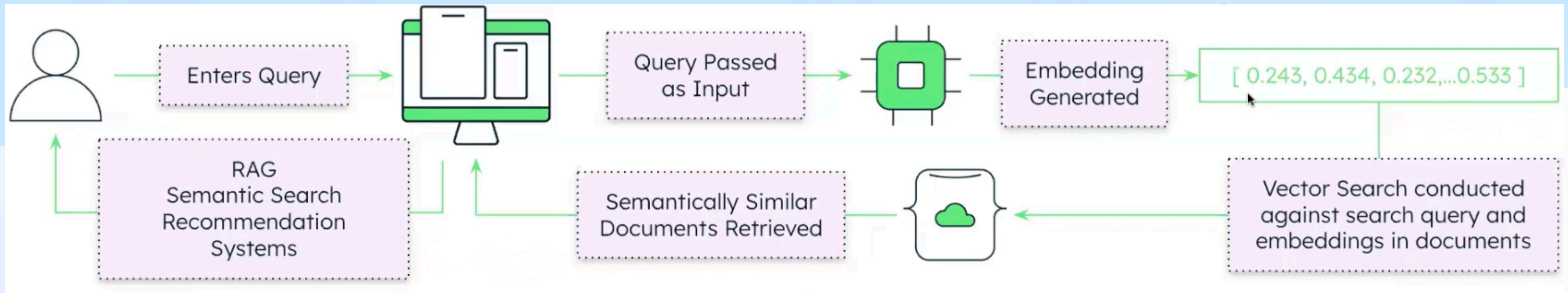
```
db.documents.aggregate([
  {
    $vectorSearch: {
      index: "vector_index",           // The name of your Atlas Vector Search index
      path: "embedding",              // Field containing vector embeddings
      queryVector: [0.11, 0.42, -0.35, ...], // The embedding of your query text
      numCandidates: 100,             // Number of candidates to consider before ranking
      limit: 5                        // Top results to return
    }
  },
  {
    $project: {
      _id: 1,
      content: 1,
      score: { $meta: "vectorSearchScore" } // Include similarity score in output
    }
  }
])
```


MongoDb Vector search

Only in Atlas (soon on premise)

"Teach me about artificial intelligence"

```
db.documents.aggregate([
  {
    $vectorSearch: {
      index: "vector_index",           // The name of your Atlas Vector Search index
      path: "embedding",              // Field containing vector embeddings
      queryVector: [0.11, 0.42, -0.35, ...], // The embedding of your query text
      numCandidates: 100,              // Number of candidates to consider before ranking
      limit: 5                          // Top results to return
    }
  },
  {
    $project: {
      _id: 1,
      content: 1,
      score: { $meta: "vectorSearchScore" } // Include similarity score in output
    }
  }
])
```



```
[ { "title": "Advanced Artificial Intelligence: Concepts and Applications", "author": "Sarah Johnson", "year": 2022, "score": 9.8 }, { "title": "Machine Learning and AI in Business", "author": "Michael Chen", "year": 2019, "score": 8.5 }, { "title": "The Future of Intelligence: Artificial and Beyond", "author": "Emily Rodriguez", "year": 2021, "score": 7.9 }, { "title": "AI in Healthcare: Revolutionizing Patient Care", "author": "Dr. Robert Williams", "year": 2020, "score": 7.2 } ]
```

Hybrid search

Combining search and vector search