

# SEO-EdgeRank API Documentation

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## Overview

**SEO-EdgeRank** is a powerful API designed to evaluate and optimize content based on **search intent satisfaction**, **semantic topical coverage**, and **Edge SEO rendering performance**. Unlike traditional SEO tools that rely solely on keyword metrics, SEO-EdgeRank incorporates **server-side rendering (SSR)** checks, **structured data analysis**, and **web vitals prediction models** via ML-powered endpoints.

This API is ideal for:

- **Technical SEOs**
  - **Headless CMS teams**
  - **JAMstack developers**
  - **Content strategists**
  - **SaaS platforms with SEO-driven growth**
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## Key Features

Feature	Description
Intent Mapping	Uses NLP to detect search intent (transactional, informational, and navigational).
Semantic Entity Score	Maps content to knowledge graph & evaluates coverage of core topics.
Rendering Mode Test	Compares SSR, CSR, and ISR modes for crawlability & indexing.
LCP & CLS Forecasting	Predicts Core Web Vitals performance pre-deployment.
JSON-LD Validator	Validates structured data for FAQ, HowTo, Product, and Article schema.

Feature	Description
Canonicalization Analysis	Tests canonical tag influence on content clusters.
Edge Rendering Audit	Edge cache check for SEO compliance (Cloudflare, Vercel, Akamai).

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## Base URL

bash

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<https://api.seo-edgerank.io/v1/>

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## Authentication

Use Bearer Token authentication for all endpoints.

http

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Authorization: Bearer {YOUR\_API\_KEY}

Generate your API key from the Developer Dashboard.

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## Endpoint: /intent-map

### Purpose

Analyze a URL or content block and detect dominant search intent.

### Request

http

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POST /intent-map

## Headers:

json

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```
{  
  "Authorization": "Bearer YOUR_API_KEY",  
  "Content-Type": "application/json"  
}
```

## Body:

json

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```
{  
  "content": "<your content or URL>",  
  "language": "en"  
}
```

## Response

json

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```
{  
  "intent": "informational",  
  "confidence": 0.94,  
  "secondary_intents": ["navigational"]  
}
```

## Use Case

Ensure your **landing pages** match the **user search intent**, reducing bounce rate and increasing conversion.

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## Endpoint: /semantic-score

### Purpose

Returns semantic keyword coverage using a dynamic **entity graph** aligned with Google's NLP model.

### Request

http

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POST /semantic-score

### Body:

json

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```
{  
  "text": "<entire article or blog content>"  
}
```

### Response

json

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```
{  
  "coverage_score": 86.3,  
  "missing_entities": [  
    "Edge computing in SEO",  
    "Cumulative layout shift",  
    "Prerendering"  
  ],
```

```
"top_entities": [  
  "Page experience",  
  "Core Web Vitals"  
]  
}
```

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## Endpoint: /rendering-audit

### Purpose

Diagnose how different rendering strategies affect your site's **crawlability** and **indexability**.

### Modes Tested:

- Server-Side Rendering (SSR)
- Client-Side Rendering (CSR)
- Incremental Static Regeneration (ISR)

**Bonus:** Detects JavaScript rendering blockers and async conflicts.

### Response:

json

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```
{  
  "render_mode": "SSR",  
  "crawl_ready": true,  
  "issues": [],  
  "recommendation": "Continue using SSR or ISR with hydration fixes"  
}
```

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## Endpoint: /predict-vitals

### Purpose

Estimate **LCP**, **FID**, and **CLS** based on code-level heuristics and simulate mobile loads.

### Use Case

Ensure **pre-launch performance compliance** for Google's Page Experience signal.

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## Endpoint: /structured-data/validate

### Purpose

Validate embedded schema.org microdata or JSON-LD.

### Supported Types:

- FAQPage
- HowTo
- Product
- Article
- JobPosting

json

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```
{
```

```
  "valid": true,
```

```
  "errors": [],
```

```
  "warnings": ["Missing publisher logo for Article schema"]
```

```
}
```

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## SEO Use Cases

Use Case	How SEO-EdgeRank Helps
Content Intent Mismatch	Fix bounce-heavy blog posts by aligning with detected search intent
Thin Content	Use entity graph scoring to identify topical gaps
JS SEO Issues	Audit hydration & rendering for CSR/SSR hybrid sites
Structured Data Errors	Validate and optimize schema markup
Edge CDN Compatibility	Confirm edge-cache rendered HTML is SEO-safe

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## Advanced Usage: Automation + CI/CD

You can integrate SEO-EdgeRank into CI/CD pipelines to run automated checks:

yaml

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- name: Run Semantic Coverage Check

run: |

```
curl -X POST https://api.seo-edgerank.io/v1/semantic-score \
-H "Authorization: Bearer ${ secrets.SEO_API_KEY }" \
-d @content.json
```

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## Technologies Behind the API

- **Node.js & Fastify** for API performance
  - **spaCy** and **BERT NLP models** for intent detection
  - **OpenGraphQL** for future custom querying
  - **CDN-based logging hooks** with **Cloudflare Workers**
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## Security & Rate Limits

Plan	Requests/Day	Max Content Size
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Free	500	30KB
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Pro	10,000	100KB
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Enterprise Unlimited		Custom Limits
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## Support & Community

- **Docs:** <https://seo-edgerank.io/docs>
- **Slack Group:** SEO-EdgeRank Pro Circle
- **GitHub SDKs:** Python, JS, and PHP clients available
- **Support Email:** [support@seo-edgerank.io](mailto:support@seo-edgerank.io)