

Headai Scientist: Getting Started

Talk to your data

Headai Scientist is an autonomous AI analyst for workforce intelligence, labour market insight, semantic trend detection, and strategic foresight. It is powered by Vibe-Analysis, Headai's proprietary approach to semantic strategic interpretation, combining signal detection, graph intelligence, and narrative synthesis into explainable strategic understanding that goes far beyond what traditional analytics tools can produce.

Scientist is designed for workforce planners, educators, regional developers, public sector organizations, innovation ecosystems, and strategic consultants who need to make informed, forward-looking decisions based on complex and rapidly evolving labour market data.

What makes Scientist exceptional is not just what it can do. It is how it does it. You describe what you want to understand in plain language. Scientist chooses the right analytical workflow, orchestrates the steps, and delivers results. No configuration. No pipeline setup. No technical expertise required.

With a single prompt, Scientist can generate multi-year ecosystem snapshots, detect emerging skill signals, compare regions, identify gaps between education and labour demand, and synthesize everything into executive-ready strategic reports, dashboards, and visualizations.

The goal is not only to answer a question, but to produce reusable analytical artefacts: knowledge graphs, keyword lists, scorecards, signal analyses, recommendations, and strategic reports that can be explored, continued, presented, and shared across your organization.

What Scientist is for

Most analytics tools require you to know the answer before you can ask the question. Headai Scientist reverses that model entirely.

You can start with almost anything: a region, an industry, a year, a skill area, a piece of text, or just a vague strategic question. Scientist transforms that starting point into a semantic map, compares it with other maps, identifies differences and gaps, detects trends over time, and generates a report or visualization that explains what the data actually means, not just what it contains.

This is the kind of intelligence that matters when the questions are hard:

- What skills are becoming more important, and which are quietly disappearing?
- How does one region's workforce profile differ from another's?
- Where are the gaps between what education produces and what the labour market demands?
- What should a person or organization learn next to stay relevant?
- How do you turn three years of labour market data into a clear strategic narrative for your leadership team?

Scientist handles all of this. And it does it through conversation.

The basic idea

The single most important shift when using Scientist is treating it as an analytical colleague rather than a search box. It does not return documents. It builds understanding iteratively, step by step, from whatever you give it.

You can ask for a single operation:

```
Create a graph about renewable energy jobs in Finland for 2025.
```

You can ask it to continue from an earlier result:

```
Analyze result_3 and give me insights.
```

You can ask it to refine or clean a result:

```
The graph is too large; can you clean it up?
```

And you can ask for a multi-step workflow in one message:

```
Create an ICT-sector snapshot for Turku from january 2026 and the same from tampere. finally gaps of these two.
```

Scientist keeps track of result artefacts during the session. That means you can refer to earlier outputs naturally by using forms such as `result_1`, `result 1`, or just `1`.

What Scientist can produce

Every output Scientist produces is a reusable analytical artefact. Not a chat answer that disappears, but something you can continue working with, share, or build on in the next step.

Scientist creates semantic knowledge graphs from labour market data, research literature, investment data, education content, free-form text, or earlier results. These graphs surface hidden themes, concepts, and relationships that would take weeks to find manually.

It compares two graphs with a scorecard, showing overlaps, gaps, and structural differences. This works for regional comparison, time-based comparison, curriculum-to-labour-market alignment, or any strategic gap analysis.

It builds signal analyses across multiple time periods, showing not just what exists but what is growing, weakening, or emerging. This is the kind of foresight that supports long-term planning.

It generates recommendations: similar jobs, relevant courses, or next skills to develop, based on a graph or a simple list of current skills.

And it produces strategic reports and visualizations: dashboards, Sankey diagrams, sunburst views, and 3D graph views that are ready to present, share, or drop into a slide deck.

First things to try

The following prompts are a good starting point for any new session.

Orientation prompts

Typing **help** or **?** opens an interactive quick-action panel with clickable buttons for the most common workflows. It is the fastest way to get started without writing a prompt.

```
help
```

```
results
```

```
status
```

Asking what countries and cities are covered gives you the full scope of the data:

```
which countries and cities are supported?
```

Sample prompts: full reference

Asking for sample prompts gives a categorized overview of everything Scientist can do. This is the most useful single prompt for a new user.

```
show me sample prompts!
```

The response covers all major capability areas:

Build graphs. Create a semantic knowledge graph from a topic, location, year, or text.

Compare / gaps. Compare two graphs and surface overlaps, gaps, and differences.

Trends / signals. Analyze how a theme changes over time and detect emerging topics.

Reports / analysis. Generate analytical reports and summaries from existing results.

Strategic reports / dashboards. Produce full strategic reports, dashboards, Sankey diagrams, and visual overviews.

Recommendations / matching. Find similar jobs, recommend courses, or identify next skills to learn based on a profile or result.

Keywords. Extract or generate keyword lists from text, results, or domain descriptions.

Modify / clean graphs. Filter, reduce, weight, or remove terms from an existing graph.

Results / status. List all session results, check what is running, or inspect a specific result.

Each category works in both English and Finnish. You can also ask for:

how can you help me?

beginner prompts

advanced prompts

Finnish-only sample prompts

Working with text

Scientist can turn plain text into structured outputs. This is useful when you already have a paragraph, a report excerpt, a strategy text, or some other description that you want to analyze semantically.

Extract keywords from this text: 'The ICT sector in Turku has been growing steadily over the past few years, with a significant increase in software development jobs. However, there is a noticeable gap in cybersecurity expertise compared to Helsinki.'

Create me a graph from this text: 'The IT sector in Turku has been growing steadily over the past few years, with a significant increase in software development jobs. However, there is a noticeable gap in cybersecurity expertise compared to Helsinki.'

```
Extract keywords from this text: 'Artificial intelligence is transforming industries worldwide.'
```

Bringing your own data

Scientist is not limited to built-in datasets. You can bring in content from the web, your own documents, or direct text and use it as the starting point for any analysis.

Import a graph by URL

If you have a direct URL to a Headai deepgraph, you can import it as an artefact using the structured import format:

```
import https://megatron.headai.com/.../result.json "Regional Skills Report 2025" en
```

```
import https://megatron.headai.com/.../result.json "Osaamiskatsaus 2025" fi
```

The format is `import URL legend language`, where `legend` is a short descriptive label and `language` is the two-letter ISO code (`en`, `fi`, `sv`, etc.). The imported graph becomes a session artefact that you can analyze, compare, or build on immediately.

Upload a document

You can upload files directly from your device using the attachment button in the chat interface. Supported formats include PDF, Word documents (.doc and .docx), and plain text files. Once uploaded, the document becomes an artefact that Scientist can analyze, summarize, extract keywords from, or use as the basis for a graph.

```
I uploaded our regional skills strategy document. Extract the key themes and build a graph.
```

```
Summarize the uploaded report and identify the main skill areas it covers.
```

```
Build a knowledge graph from the uploaded PDF.
```

Scrape a web page

To fetch content from a public webpage, use the web scraper panel available in the interface. Paste the URL, optionally set filters or depth, and click Scrape. The extracted text is then available to send to Scientist as your input.

What happens next

In all cases, the uploaded or fetched content becomes a session artefact. From there you can apply the same operations as with any other result: extract keywords, build a graph, run a report, compare with labour market data, or ask Scientist to explain what it found.

```
Build a graph from result_1.      # where result_1 is the uploaded document
```

```
Compare result_2 with the ICT sector graph I built earlier.
```

This means your own documents, web content, and strategy texts become fully integrated with Headai's labour market intelligence. You can align a curriculum document with job market demand, compare a strategy report with live signal data, or turn any text into a structured semantic map.

Building and continuing graphs

Graphs are one of the central outputs in Scientist. A graph turns a topic, text, dataset, or earlier result into a semantic structure that can be explored, filtered, compared, translated, visualized, or used as input for further analysis.

```
Create me a graph from the result 1.
```

```
Create a graph about renewable energy jobs in Finland for 2025.
```

```
Show me a knowledge graph of AI-related job ads in Helsinki for 2024.
```

Once a graph exists, you can continue working with it. For example, you can ask Scientist to explain the themes, reduce noise, or make the graph easier to interpret.

```
Analyze result_3 and give me insights.
```

What are the key themes in result_5?

What themes appear in result 3?

Cleaning, filtering, and improving results

Real labour market data can be broad, noisy, or too large for immediate interpretation. Scientist includes refinement tools so that you can reduce noise, focus on stronger signals, remove irrelevant words, or limit the size of a graph.

The graph is too large; can you clean it up?

Modify 2 to have weight=3.

Filter 2 to reduce noise and improve quality.

Remove noise from result 5.

Filter result 4 to be smaller.

Remove the words python, java, oracle from result 7.

Limit result 9 to a maximum of 200 nodes.

Apply weight 3 and value 3 to result 10.

This kind of iterative work is often where Scientist becomes most useful. You do not need to get the first graph perfect. You can build, inspect, clean, narrow, translate, compare, and report step by step.

Comparing results and finding gaps

Scientist can compare graphs and identify gaps, overlaps, and differences. This is useful for regional comparison, time-based comparison, curriculum-to-labour-market comparison, or strategic alignment work.

Compare the graph of AI jobs in 2023 with one for 2025.

Can you show the differences between renewable energy jobs in Tampere and Turku?

Create an ICT-sector snapshot for Turku from January 2026 and the same from Tampere. Finally, gaps of these two.

Create a strategic report from results 4 and 5 and focus on skill gaps.

You can also ask Scientist to improve a result toward a target.

Improve result 5 until the score is at least 80.

Trend and signal analysis

Scientist can analyze change over time. This is especially useful when the question is not only what exists now, but what is changing.

Do me a Turku ICT-sector trend analysis for years 2023–2025.

Build a trend for AI jobs in Finland for 2023, 2024, and 2025.

Show me a signal analysis of renewable energy trends over the last three years.

Trend and signal analysis helps users move from static descriptions toward foresight: what is growing, what is weakening, and what may become strategically important.

Reports and analysis

Scientist can generate different forms of analytical explanation from results. This is useful when the output needs to be understandable for decision makers, customers, stakeholders, or internal planning.

Give me a report from result 2.

what are the reports you can do?

Create a strategic report from 3.

Generate a comprehensive analysis for result_1 and result_2.

Run a quality report on result 5.

A good workflow is to first build or compare graphs, then ask Scientist to produce a report from the most relevant result.

Visualizations

Scientist can produce visual views from existing results. Visualizations are helpful when a graph or comparison needs to be explored, presented, or communicated quickly.

What are the visualizations you can do?

show graph sankey comparing results 1 and 5.

Show result 4 in 3D.

Show result 7 as a sunburst.

Create a sankey diagram from results 3 and 6.

Visual prompts usually work best after one or more graph or comparison results already exist.

Joining and translating results

Scientist can combine graphs and translate outputs. This is useful when you want to merge several perspectives or prepare material for a different language context.

Join 2 and 3.

Join results 3, 5 and 8.

Translate result_3 to finnish.

Can you make result_6 available in English?

Recommendations for jobs, courses, and skills

Scientist can use skills or earlier results as input for recommendations. This supports career guidance, reskilling, curriculum design, and workforce development.

Recommend to me similar jobs based on my current skills: 'python, programming, software, object_oriented_programming, machine_learning'

Recommend to me similar jobs based on my current skills based on result 4.

Find similar jobs using result 8.

Recommend courses for me with the skills: python, statistics, machine learning.

```
Find jobs for skills: sales, CRM, negotiation.
```

```
What jobs suit me with the skills SQL, Power BI, analytics?
```

```
What should I learn next based on AI and data engineering skills?
```

Registration and team mode

By default, Scientist works as a guest. You can start immediately without any setup, and your session history is available for as long as your browser session lasts. For most first-time explorations, that is all you need.

When you are ready to keep your work across sessions, register with a name and email:

```
Register me for saving my session history.
```

Registration saves your analytical history so you can return to it later, pick up from earlier results, and build on previous work over time. If you ever switch devices or lose your session, your registered email is the key to recovering it.

For teams working on shared intelligence, such as regional analysts, consulting teams, or workforce planners collaborating across an organization, team mode makes all results visible and reusable across everyone who shares the same access key:

```
Switch my session to team mode with this key: HEADAI_API_KEY
```

In team mode, one analyst's graph becomes another's starting point. The analytical artefacts accumulate across the team rather than disappearing with each individual session.

Multi-step workflows in a single prompt

This is where Scientist genuinely has no peer. You can describe an entire analytical workflow spanning multiple data sources, years, comparisons, and output formats in a single natural language sentence. Scientist plans the steps, executes them autonomously in order, and notifies you when the work is done.

A simple goal with a quality target:

Increase the quality of result_1 until it is at least 81.

A regional comparison that ends in a report:

Create a graph from Helsinki mobile machinery sector for 2025 and 2026, score them, generate a strategic report, and display it.

A full strategic workflow from scratch:

Create a graph from Tampere information technology sector for 2025 and 2026, compute the score between them, generate a strategic report, build a dashboard, and display it.

You do not need to manage the steps manually. Scientist tracks the results, passes them forward, and notifies you when the workflow is complete.

A practical first test path

If you are testing Scientist for the first time, begin with this short sequence instead of trying every feature at once.

Start by checking the system:

help

Build a graph:

Create a graph about renewable energy jobs in Finland for 2025.

Ask what it contains:

What are the key themes in result_1?

If the graph is too broad, clean it:

The graph is too large; can you clean it up?

Create a report:

```
Create a strategic report from result_2.
```

Then try a visualization:

```
Show result_2 as a sunburst.
```

This sequence covers the full loop: create, inspect, refine, explain, and visualize. All results are always visible in the results panel on the right, so you can refer to any of them at any point.

How to write good prompts

Scientist understands short prompts, but it becomes more powerful when you include the topic, location, time period, and desired output.

A compact prompt can be enough when you know what you want:

```
Build a trend for AI jobs in Finland for 2023, 2024, and 2025.
```

A broader prompt can ask for multiple steps at once:

```
Create an ICT-sector snapshot for Turku from january 2026 and the same from tampere. finally gaps of these two.
```

A follow-up prompt can rely on earlier results:

```
Create me a graph from the result 9. # assuming 9 is a text artefact.
```

```
Get keywords from result_7. # assuming 7 is a text artefact.
```

The most important habit is to keep working with the artefacts. Build a result, inspect it, refine it, compare it, and then generate a report or visualization.

Why this matters

The organizations that will make the best workforce decisions in the next decade are not the ones with the most data. They are the ones that can interpret it fastest and act on it most clearly.

Headai Scientist is built for exactly that. It takes the complexity of semantic analysis, temporal comparison, signal detection, and strategic reporting and makes all of it accessible through a conversation. The depth is real. The outputs are rigorous. And the barrier to getting there is a single well-phrased sentence.

That is not a small thing. It is a fundamental shift in how workforce intelligence gets done.

Summary

Headai Scientist is the fastest path from a workforce question to a strategic answer.

It builds graphs, analyzes text, compares results, detects trends, recommends jobs and courses, generates reports, creates visualizations, translates outputs, and continues from earlier artefacts, all through natural language, all without configuration.

The best way to experience it is to start with a single prompt, see what it produces, and follow the thread from there. The depth reveals itself quickly.