

M C P S E R V E R

N O C O D E

C L O U D H O S T E D

Climbing Pitch Average MCP.

Get precise data on your climbing routes and sessions.

Climbing Pitch Average MCP lets your AI client analyze climbing performance by calculating pitch lengths and route statistics. You can pull session summaries, compare different routes, or find specific pitch lengths to better understand the physical demands of your climbs.

A+ Quality Score 100/100

climbing

pitch-length

route-stats

outdoor-sports

climbing-data



SCAN TO VIEW

The connectivity layer between AI and the world's software.

Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.

— Architecture principle

Four Pillars of the Vinkius Runtime

01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

AES-256

Encryption at rest

Ed25519

PKI vault signatures

24h TTL

Ephemeral session keys

V8 Isolate

Sandboxed execution

One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

Emergency Kill Switch

EU AI Act Art. 14(1)
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

Control Plane

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

FinOps

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

Firewall & DLP

PII redaction activity, sensitive data protection counters, and security event timeline.

Agent Activity

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

Tool Health

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

Incident Log

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at cloud.vinkius.com — connect your AI agent in under 60 seconds.

Climbing Pitch Average MCP

4 tools available

Cloud-hosted on Vinkius

This MCP gives your AI agent the ability to parse and analyze your climbing data. Instead of manually calculating distances or scrolling through logs, you can ask your agent to handle the math for you. You can use it to get a high-level view of a single session or dive deep into the specifics of a single route. If you need to know which routes have longer individual stretches, the tool compares average pitch lengths between them. You can also isolate specific segments of a climb by filtering for pitches within a certain length range. It's built for anyone who wants to turn their climbing logs into actionable data without the manual spreadsheet work.

Core Capabilities

01 — Route Statistics

Your agent calculates total distance and average pitch lengths for any specific route.

02 — Session Overviews

Your agent summarizes all climbing activity within a single session.

03 — Pitch Filtering

Your agent identifies specific segments of a route based on length requirements.

04 — Route Comparison

Your agent compares two different routes to see which has longer stretches.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/en/ai-agent-connect/climbing-pitch-average — connect your AI agent in three steps.

- 01

Connect your preferred MCP-compatible client to Vinkius.
- 02

The MCP tools become available to your AI agent.
- 03

Ask your agent a question about a route, session, or pitch length.
- 04

The agent uses the specific tool to pull and calculate the data.
- 05

You receive the formatted answer directly in your chat interface.

You connect the MCP to your AI client and start asking questions about your climbing data.

Built For

This MCP is for climbers who track their data and want to analyze their physical output.

Outdoor Climbers

They hand off session logs to the AI to understand route difficulty and length.

Climbing Coaches

They use the data to analyze athlete performance and route selection.

Data Enthusiasts

They use the tools to turn raw climbing logs into structured route statistics.

What Changes When You Connect

- 01

Calculates pitch averages without manual math.
- 02

Identifies specific pitch lengths within a route.
- 03

Compares different routes side by side.

04 Summarizes entire climbing sessions instantly.

Real-World Applications

Route Planning

Check the average pitch length of a route to decide if your gear is sufficient.

Performance Tracking

Compare different routes to see which ones involve longer, more taxing stretches.

Session Review

Get a quick summary of everything you climbed during a single outing.

Segment Analysis

Find specific pitches in a route that fall within a certain length range.

Patterns to Avoid

Manual Math Errors

❌ AVOID

You try to manually add up pitch lengths in a spreadsheet to find an average for a route.

✓ INSTEAD

Let your agent do the heavy lifting. Use ``get_route_statistics`` to get the total distance and average pitch length instantly.

Vague Route Comparisons

❌ AVOID

You ask your agent if two routes are similar without looking at the actual pitch distribution.

✓ INSTEAD

Get specific. Use ``compare_routes_average`` to see exactly which route has longer individual stretches.

Missing Specific Segments

❌ AVOID

You scroll through a long log trying to find where a specific long pitch occurred.

✓ INSTEAD

Use ``filter_pitches_by_length`` to isolate only the segments that fall within your required length range.

The Right Fit

Connect this MCP if you maintain climbing logs and want to analyze physical output without manual calculations. If you don't track your climbs or don't care about pitch-level data, you don't need this. The deciding factor is whether you want to turn raw logs into actionable route statistics.

Climbing Pitch Average: 4 Specialized Tools

These tools handle the math and filtering for your climbing logs. Your agent uses them to extract specific route stats or session summaries from your raw data.

#	TOOL	DESCRIPTION
01	compare_routes_average	This tool compares the average pitch lengths of two routes. It shows you which route has longer individual stretches.
02	filter_pitches_by_length	This tool finds specific pitches within a route. It identifies segments that fall into your chosen length range.
03	get_route_statistics	This tool calculates the total distance and average pitch length for a specific route.
04	get_session_summary	This tool provides a high-level overview of all climbing activity recorded in a single session.

See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

U What is the average pitch length for route 'el-capitan-001'?



The average pitch length for route 'el-capitan-001' is 45.5 meters, with a total distance of 455 meters across 10 pitches.

U Find all pitches in route 'north-face-99' that are between 20 and 40 meters long.



I found 3 pitches in that range: Pitch ID P-102 (25m), Pitch ID P-105 (32m), and Pitch ID P-108 (38m).

U Compare the average pitch length of route 'route-a' and 'route-b'.



Route 'route-a' has an average pitch length of 30m, while 'route-b' has 35m. Route 'route-b' has longer individual stretches.

Frequently Asked Questions

01 What can this MCP do for my climbing data?

It allows your AI client to calculate route statistics, summarize climbing sessions, filter pitches by length, and compare different routes.

02 Which AI clients can I use with this MCP?

You can use this MCP with any compatible client like Claude, Cursor, Windsurf, or VS Code.

03 How do I compare two different climbing routes?

You can ask your agent to use the `compare_routes_average` tool to see which route has longer individual stretches.

04 Can I find specific pitches in a long route?

Yes, you can use the `filter_pitches_by_length` tool to find segments that fall within a specific length range.

05 Do I need to host this myself?

No, Vinkius hosts and manages the MCP for you, so it is ready to use immediately after you connect.

06 How do I get statistics for a specific route?

You can use the `'get_route_statistics'` tool by providing the unique route identifier.

07 Can I compare two different climbing routes?

Yes, the `'compare_routes_average'` tool allows you to compare the average pitch lengths of two routes.

08 What information is included in a session summary?

The `'get_session_summary'` tool provides the average pitch length, total pitch length, total number of pitches, and the number of routes completed in that session.

Go Live in 60 Seconds

Get your connection token from cloud.vinkius.com, then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

`https://edge.vinkius.com/[TOKEN]/mcp`

CLIENT	WHERE TO CONFIGURE
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"climbing-pitch-average": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	Extensions → Add MCP Server → Paste endpoint URL

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  Ask ChatGPT 
-  Ask Claude 
-  Ask Perplexity 
-  Ask Gemini 
-  Ask Grok 

READY TO CONNECT

Climbing Pitch Average is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and
start building. No SDK. No deployment. Just results.

Start at cloud.vinkius.com →

vinkius.com · support@vinkius.com

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Platform	Vinkius Cloud for AI Agents
Endpoint	https://edge.vinkius.com/{token}/mcp

LICENSE & USAGE

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