

Backend API Technology Usage (2021–2025)

Technology	Companies (Prod Usage)	Industries / Use Cases	Geography	Notable Companies	Adoption Trend (2021–25)
FastAPI	~187 companies (StackShare)	APIs and microservices; popular in e-commerce, fintech, healthcare, travel ² ; ML/ AI model serving ³	Global (NA, Europe, Asia) ⁴	Microsoft, Uber, Netflix	Rapid growth: usage among Python devs rose 21%→29% (2021–23) ³; global adoption expanding ⁴
Express.js	~2,065 companies	Web APIs for social, finance, logistics, etc.; core of many Node apps	Global	Twitter, Accenture, Intuit ⁵	Mature and widespread; Node.js backend staple. Dev usage ~23% (2022)→19.5% (2023) 6 7 (slightly declining share)
Node.js	~7,500 companies	General backend (streaming, real-time, microservices) – used in media, ride-share, fintech	Global	Netflix, Uber, PayPal, Twitter ⁸	Dominant runtime: ~47% (2022) \rightarrow 43% (2023) of devs use it 6 9 ; still top (\approx 41% in 2024) 10
NestJS	~438 companies	TypeScript- based server- side framework; enterprise and microservice APIs	Global	Kevin. (fintech), other startups	Emerging: not listed in 2022 survey but ~5.8% of devs in 2023 7 (≈6% in 2024 10). Adoption climbing in recent years.

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Firebase	~3,206 companies	Mobile/web real-time backends; used in gaming, chat, IoT, e-commerce apps	Global	Twitch, Instacart, LaunchDarkly	Longstanding BaaS platform; usage ~21% (2022)→15% (2023) of devs 14 15 (showing slight decline vs alternatives)
Supabase	~77 companies	Open-source BaaS (Postgres) for web/mobile apps; Firebase alternative	Global	Smaller teams (e.g. Development, radrat) 16	Emerging: ~3% of developers report using it (2023) 17; growing interest since 2020 as an open-source backend platform.

Technology-specific Insights

FastAPI: A modern Python API framework, FastAPI is used by hundreds of companies (StackShare lists ~187) ¹. It excels in high-performance, async APIs – common use cases include fintech, e-commerce, healthcare and travel services ². It's also favored for ML/AI model deployments and data science endpoints ³. Adoption has surged recently: JetBrains reports FastAPI usage among Python developers rose from 21% in 2021 to 29% in 2023 ³. Notable users include Microsoft, Uber, and Netflix ³. Geographically, FastAPI is used globally (with clusters in North America, Europe and Asia ⁴). In summary, FastAPI's rapid growth reflects its popularity for building production APIs quickly and efficiently.

Express.js: Express is a minimal Node.js web framework and a core part of many backend stacks. Over 2,000 companies list Express in production ⁵. It's used across industries for standard web APIs and server-side apps (e.g. social media, fintech, travel) – companies like Twitter, Accenture, and Intuit are known users ⁵. Express underpins many Node.js services due to its simplicity. According to StackOverflow surveys, ~23% of developers had used Express in 2022, dropping to ~19.5% in 2023 ⁶
⁷, indicating a modest decline in share as newer frameworks (Fastify, Koa, etc.) emerge. Nevertheless, Express remains widely adopted globally in both startups and enterprises.

Node.js: As the JavaScript runtime, Node.js itself (often with frameworks) dominates backend development. Tens of thousands of companies use Node.js (StackShare cites ~7.5k) ⁸, including Netflix, Uber, PayPal, and Twitter ⁸. It's employed in streaming platforms, ride-sharing services, fintech, and real-time systems. StackOverflow surveys show Node.js was the most-used web framework (47% of devs in 2022, 42.7% in 2023 ⁶ ⁹, ~40.8% in 2024 ¹⁰). This indicates a high, if slightly ebbing, usage level. Node.js usage is globally distributed, reflecting its ubiquitous role in web and cloud applications. Overall, Node.js remains a dominant, mature backend runtime.

NestJS: NestJS is a newer progressive Node.js framework (TypeScript-based) for scalable server-side apps. StackShare lists about 438 companies using NestJS 11 (e.g. fintech firm Kevin.). It's favored for structured, enterprise-grade APIs and microservices. NestJS was essentially absent from the 2022 developer survey, but by 2023 about 5.8% of developers reported using it 7 (\approx 6.6% of professional devs in 2024 18). This suggests rapid adoption, especially in new projects. Notable use cases include backend services in tech startups and companies adopting TypeScript at scale. In summary, NestJS is on a strong upward trend among Node ecosystems.

Firebase: Firebase is a Google-backed realtime BaaS/platform. Over 3,200 companies have Firebase in their stack ¹², including media and e-commerce players (Twitch, Instacart, LaunchDarkly) ¹³. It's widely used for mobile and web apps needing real-time databases, authentication, and hosting. Industries range from gaming and social apps to IoT. Surveys show Firebase was used by about 21% of developers in 2022 ¹⁴, dropping to ~15% in 2023 ¹⁵. This decline may reflect competition from other cloud and backend services. Nonetheless, Firebase remains a leading backend choice for real-time and event-driven applications worldwide.

Supabase: Supabase is an open-source Firebase alternative built on Postgres. It's much newer; only ~77 companies are listed as using Supabase ¹⁶. Typical use cases are similar to Firebase (web/mobile backends, real-time apps) but with SQL databases and open-source stack. Companies using it tend to be small teams or startups (StackShare examples like "Development" and "radrat" ¹⁶). In the 2023 survey, ~3% of respondents indicated using Supabase ¹⁷ (FastAPI use was ~7.7% the same year), reflecting early-stage adoption. Supabase has seen rapid growth in popularity since 2020, especially among developers who prefer self-hosted, relational backends. Adoption is still nascent but rising quickly in recent years.

Trend Summary: Overall, Node.js and its frameworks continue to dominate backend APIs, with Node.js remaining the most-used platform (~40–47% of devs) ⁶ ¹⁰. Express.js is ubiquitous in production backends, though its relative share has edged down slightly. FastAPI – the leading Python API framework – has seen significant uptake (growing use in recent surveys ³), making it one of the faster-growing backend choices. NestJS has emerged strongly within the Node/TypeScript community. Firebase usage is large but has shown minor declines in developer surveys ¹⁴ ¹⁵. Supabase, while still niche, is gaining traction. Geographically, all these technologies are used globally, with major tech hubs in North America, Europe, and Asia leading adoption.

Sources: Developer surveys (StackOverflow, JetBrains), StackShare stats, and tech reports as cited 1 5 12 8 3 2 11 14 15 10.

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⁸ Why use node.js for backend : A complete case study with pros and cons - AshramTech https://www.ashramtech.com/why-use-node-js-for-backend-development/

¹⁰ ¹⁸ Technology | 2024 Stack Overflow Developer Survey https://survey.stackoverflow.co/2024/technology

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