

AI Job Seeker Speedrun: Master Applications Using Open-Source Scraping & Automation

This playbook is your no-nonsense guide to automating job applications using real, open-source tools—no fluff, no overpromising. It teaches you how to build an automated job seeker workflow from scratch using scraping, local LLMs, and automation tools—all for free.

1. Why Use Open-Source Tools?

Open-source tools like Scrapy, Trafilatura, and Crawlee are battle-tested, free, and customizable. They're perfect for building robust scraping pipelines without paying licensing fees.

2. What You'll Build in This Playbook

You'll learn how to scrape job boards, extract application data, and auto-fill forms using local LLMs and automation tools—without relying on proprietary SaaS.

3. The Speedrun Method

We cut straight through the noise: you won't waste time with theory. Each section gives you actionable code or steps that work in minutes—not hours.

4. Scrapy vs. ScrapeGraphAI: When to Use What

Use Scrapy for large-scale scraping and data extraction; use ScrapeGraphAI when you want graph-based scraping logic, especially with LLMs.

5. Install Trafilatura for Clean HTML Scraping

Trafilatura extracts clean text from HTML pages—ideal for parsing job descriptions or company bios before feeding them into LLMs.

6. How to Use Automatisch for Workflow Automation

Automatisch allows you to automate repetitive tasks like sending emails, filling forms, and managing data flows—all without code.

7. Setting Up a Local LLM Runner (Fastio Guide)

Learn how to use local LLM runners like those listed in Fast.io's 2025 benchmarks for agent-based workflows without cloud reliance.

8. Build an Application Filler Agent Using Local LLMs

Use a local LLM to auto-generate cover letters or answers to job-specific questions—no more copy-pasting from templates.

9. Scrape Multiple Job Boards in One Go

We show you how to combine tools like Crawllee and Scrapy to fetch listings across multiple platforms at once.

10. Extract Job Data with Python + BeautifulSoup (No Need for APIs)

Learn how to parse HTML directly using BeautifulSoup and other open-source libraries, which works even on sites without public APIs.

11. Create a Custom MCP Agent for Integration

Use the open-source API agent from Agoda's launch to create an integration layer that connects your scraping tools with automation workflows.

12. How to Parse and Store Job Details Locally

We walk through how to store scraped job data in local databases using open-source tools—no cloud dependency needed.

13. Use MOO Resources for Managing Your Scraping Assets

Even though it's not open source, you can use MOO Resources to organize your scrapers and tools, improving productivity across multiple projects.

14. Automate Resume Uploads Using Form Fillers

We teach how to auto-fill job applications with your resume, cover letter, and contact info using automation platforms like Automatisch.

15. Optimize Your Scraping with Rate Limits & Proxies

Learn how to avoid getting blocked by job boards by implementing rate-limiting and rotating proxies in your scraping pipeline.

16. How to Use GNU Support Documentation for Troubleshooting

GNU's documentation can help you debug system-level issues when running scrapers or LLMs on Linux or other open-source OSes.