

# Job Opportunity Notifier & Tracker (n8n Workflow)

This project is an automated pipeline built using **n8n** — an open-source workflow automation tool. It fetches remote job listings from Remotive's API, summarizes job descriptions using Hugging Face's NLP models, and then:

- Sends personalized email notifications for relevant job openings
  - Automatically adds job details into a Notion database for easy tracking and management
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## Features

- **Fetch remote job listings** filtered by category (e.g., Software Development)
  - **Clean and summarize** job descriptions using Hugging Face DistilBART NLP model
  - **Filter jobs** based on keywords like AI, Machine Learning, Data Science, NLP
  - **Send email alerts** with relevant job info dynamically injected into email content
  - **Create and update Notion database pages** to keep a live job application tracker
  - Fully automated workflow triggered on a schedule (daily or as configured)
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## How It Works

1. **Fetch jobs:** An HTTP Request node pulls jobs from Remotive API.
2. **Clean & summarize:** A Code node cleans HTML description text; another HTTP Request calls Hugging Face model to generate summaries.
3. **Filter:** The Code node filters for relevant jobs by keywords.
4. **Flatten data:** A Code node extracts and organizes the job details into a usable format.
5. **Send email:** The workflow sends personalized email notifications via SMTP.

6. **Add to Notion:** A Notion node creates a new page for each job in a shared database to track applications.
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## Technologies Used

- **n8n:** Workflow automation platform
  - **Remote API:** Source of remote job listings
  - **Hugging Face Inference API:** Summarization of job descriptions
  - **SMTP (Gmail):** Sending notification emails
  - **Notion API:** Job application tracking database
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## Setup & Usage

- Configure SMTP credentials with a Gmail account (App Password recommended)
  - Create a Notion integration and share your job tracking database with it
  - Set environment variables or credentials for Hugging Face API key and Notion API
  - Adjust the workflow schedule to your preference
  - Run the workflow manually or let it trigger automatically to receive job updates
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## Limitations

- Currently works on a local n8n instance; deploying publicly requires a hosted solution.
- Email recipient is static but can be enhanced with dynamic personalization.
- Notion database schema should be matched carefully with the properties set in the workflow.

## Further Improvements can be done:

- Implement advanced job filtering, ranking, and alert customization.
- **Integrate LinkedIn job scraping** using tools like Puppeteer or Selenium to expand job sourcing beyond APIs, capturing more opportunities from LinkedIn and similar platforms.
- Automate LinkedIn job application tracking by parsing and storing scraped data into the Notion database.