

Enhanced Tool Guide: Advanced Data-Driven APIs

1. Tool: Skills Gap Analysis

- **Purpose:** To programmatically compare the text of a user's resume against a target job description, identifying critical skills that are present in the job description but missing from the resume. This is vital for ATS optimization.
- **API Integration:**
 - **Hypothetical Endpoint:** api.skillsanalyzer.com/v1/compare
 - **Method:** POST
 - **Body:**

```
{  
    "resume_text": "...",  
    "job_description_text": "..."  
}
```
 - **Expected JSON Response:**

```
{  
    "matching_keywords": ["Python", "AWS", "SQL", "Agile"],  
    "missing_keywords": ["Terraform", "CI/CD", "Kubernetes",  
    "DataDog"],  
    "match_percentage": 62  
}
```
- **Workflow Example: Gemma:** "I've analyzed your resume against the Senior DevOps Engineer job description. You have a strong match on core skills like Python and AWS. However, the system has flagged 'Terraform' and 'Kubernetes' as key requirements that are not mentioned in your resume. Did you use these technologies in your role at TechCorp? (yes/no)"

2. Tool: Industry Trend Analysis

- **Purpose:** To fetch current high-level trends, buzzwords, and methodologies for a specific industry. This helps align the user's professional summary and cover letter with the latest industry conversations.
- **API Integration:**
 - **Hypothetical Endpoint:** api.industrytrends.io/v1/latest
 - **Parameters:** industry_sector={string} (e.g., "fintech", "healthcare_tech", "cybersecurity")
 - **Expected JSON Response:**

```
{  
    "industry": "Cybersecurity",  
    "top_trends": ["Zero Trust Architecture", "AI-driven Threat
```

```
Hunting", "Cloud Security Posture Management (CSPM)"] ,  
    "key_certifications": ["CISSP", "CISM", "OSCP"]  
}
```

- **Workflow Example: Gemma:** "To ensure your professional summary is current, I've checked the latest trends in Cybersecurity. 'Zero Trust Architecture' is a major focus right now. Your experience with identity and access management is highly relevant. I suggest we add a phrase like: '...with hands-on experience implementing security frameworks aligned with modern Zero Trust principles.' Would you like me to add that?"

3. Tool: Professional Profile Insights

- **Purpose:** To gather public, non-private information about an interviewer from a professional networking site to help the user build rapport and ask intelligent questions. This must be handled ethically, focusing only on professional activity.
- **API Integration:**
 - **Hypothetical Endpoint:** api.professionalnetwork.com/v2/public-profile
 - **Parameters:** profile_url={string}
 - **Expected JSON Response:**

```
{  
    "name": "Jane Doe",  
    "headline": "Director of Engineering at Acme Corporation",  
    "recent_activity": {  
        "type": "article",  
        "title": "The Future of Scalable Microservices",  
        "date": "2025-09-18"  
    },  
    "education": "University of Technology",  
    "shared_connections": 3  
}
```
- **Workflow Example: User:** "I'm interviewing with Jane Doe tomorrow." **Gemma:** "I've accessed Jane Doe's public professional profile for insights. She recently wrote an article on 'The Future of Scalable Microservices.' This is a great opportunity. For your questions at the end of the interview, you could ask: 'I saw your recent article on scalable microservices and found it insightful. How does that vision apply to the projects this team is currently working on?' This shows you've done your homework."