

The 26-Category Skill Taxonomy

Defined in /backend/app/models/skill_taxonomy.py, organized into 6 groups:

1. Technical Skills (6 categories)

- programming_languages - Python, Java, JavaScript, C++, etc.
- frameworks_libraries - React, Django, Spring Boot, TensorFlow, etc.
- tools_platforms - Git, Docker, Jira, VS Code, etc.
- databases - PostgreSQL, MongoDB, Redis, MySQL, etc.
- cloud_services - AWS, Azure, GCP, Heroku, etc.
- devops - Kubernetes, Terraform, Jenkins, CI/CD, etc.

2. Conceptual Skills (5 categories)

- software_architecture - Microservices, REST APIs, Design Patterns, etc.
- machine_learning - Neural Networks, NLP, Computer Vision, etc.
- blockchain - Solidity, Ethereum, Smart Contracts, etc.
- cybersecurity - Penetration Testing, Security Protocols, Encryption, etc.
- data_science - Data Analysis, Statistics, Visualization, ETL, etc.

3. Soft Skills (5 categories)

- leadership - Team Management, Mentoring, Strategic Planning, etc.
- communication - Technical Writing, Presentations, Public Speaking, etc.
- collaboration - Teamwork, Pair Programming, Code Reviews, etc.
- problem_solving - Debugging, Troubleshooting, Critical Thinking, etc.
- analytical_thinking - Data Analysis, Logical Reasoning, Pattern Recognition, etc.

4. Methodologies (4 categories)

- agile - Agile Development, Sprint Planning, User Stories, etc.
- scrum - Scrum Master, Sprint Retrospectives, Daily Standups, etc.
- ci_cd - Continuous Integration, Continuous Deployment, etc.
- design_thinking - User-Centered Design, Prototyping, User Research, etc.

5. Education & Certifications (2 categories)

- education - Bachelor's, Master's, PhD, etc.
- certifications - AWS Certified, Microsoft Azure, etc.

6. Domain Knowledge (3 categories)

- fintech - Payment Systems, Banking Software, Financial APIs, etc.
- healthcare_it - EHR Systems, HIPAA Compliance, Medical Software, etc.
- e_commerce - Online Retail, Payment Processing, Inventory Management, etc.

7. Other (1 category)

- other - Skills that don't fit the above categories