

## **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