Essential Skills Matrix for Success

Technical

Clinical   ML/AI

Cloud

Learning Journey
Soft Skills
- ● Fundamentals (3-6 mo)
- ● Specialization (6-12 mo)
- ● Mastery (Ongoing)
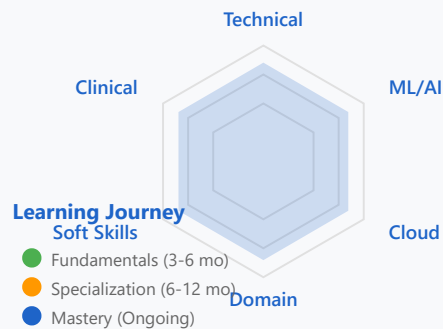
Domain

Proficiency Levels by Role

Role	Level
Entry Level	50%
Mid Level	70%
Senior	90%

Certs
AWS ML

Core Technologies

Python | R | SQL | TensorFlow | PyTorch | Cloud
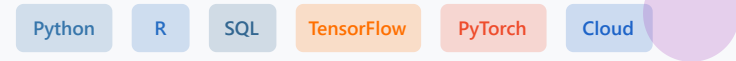
💻 Technical Competencies

- Python/R programming proficiency
- ML/DL frameworks (TF, PyTorch, scikit)
- Cloud platforms (AWS, GCP, Azure)
- Database systems (SQL, NoSQL)

🏥 Domain Knowledge

- Clinical workflows & terminology
- Regulatory requirements (HIPAA, FDA)
- Healthcare data standards (HL7, FHIR)
- Disease mechanisms & pathways

🤝 Soft Skills

- Cross-functional communication

📚 Continuous Learning

- Online courses (Coursera, edX, Udacity)

- Collaborative problem-solving
- Project management (Agile, Scrum)
- Stakeholder engagement

- Research papers & preprints
- Conference participation
- Open-source contributions

🎯 **Certification Options:** AWS/GCP/Azure ML • TensorFlow Developer • CAHIMS • RHIA/RHIT • Clinical Informatics Board