6. *Artificial intelligence, Big Data Analysis, IoT's, software development & Bioinformatics*

Stage	Technology Readiness Level	Definition
Ideation	TRL-1	• Need identified, • Development of basic use, basic properties of software architecture, Mathematical formulations, and general algorithms.
Proof of Principle	TRL-2	• Research ideas developed • Technology concept or application formulated. • To carry out analytics studies and coding starts & comparing competing technologies
Proof of concept demonstrated	TRL-3	• Concept/Pre-alpha script is ready and working draft is created.
Proof of concept established	TRL-4	• Development of limited functionality environments to validate critical properties and analytical predictions using nonintegrated software components and partially representative data • Laboratory results showing validation of critical properties.
Early stage validation	TRL-5	• Developed Software technologies to integrate with different aspects of existing system • Developed Software technologies implementations conform to target environment/interfaces. Experiments with realistic problems • Rigorous alpha testing
	TRL-6	• Feasibility of the software technology is demonstrated on full-scale realistic problems • Technology validation in a relevant end to-End environment. • Rigorous Beta testing
Late stage Validation	TRL-7	• Rigorous testing & validation by third parties
Pre-commercialization	TRL-8	• ISO/IEC 9126 software quality as per the international standards • Data Privacy & Protection as per international standards (may be complied as per HIPAA Norms) • Launch of the software
Commercialization and post market studies	TRL-9	• Continuous improvement (New versions) as per user demand and feedbacks. • Continuous incorporation of new features as per user demand and feedbacks.