Online Workshop

on

Applying AI in Software Development Life Cycle

Dates: 26th and 27th June 2025

Timings: 9:00 a.m to 1:00 p.m

Web Link: will be shared by 25th June 2025

Target Audience: ACTS Students of C-DAC (Faculty members are encouraged to attend)

Each Session: Duration of each session includes Q&A

Day I (26th June 2025)

#	Title	Focus Areas	Resource Person	Duration	Timings
	Opening Remarks		Dr. P R Lakshmi Eswari, Scientist G and Centre Head, C-DAC, Hyderabad	20 mins	9:10 a.m to 9:30 a.m
1	**Introduction to AI in Software Development Life Cycle**	Overview of AI's role in design, development, and testing processes (Entire SDLC)	Shri Mahesh Patil, Scientist F, C-DAC Hyderabad, maheshp@cdac.in	10 mins	9:30 a.m to 9.40 a.m
2	**Prompt Engineering**	Designing, analyzing, and refining the inputs (or "prompts") used to elicit responses from GenAI for various tasks such as code completion, Q & A, and automatic testing.	Mr. Yogender Kumar Knowledge Associate, yogenderk@cdac.in Ph: +91-8005841259 C-DAC Bangalore	35 mins	9:40 a.m to 10:15 a.m
3	**AI for Requirement Analysis and Design and AI-Powered Prototyping**	Automated requirement analysis, UML modeling, architectural design. Using AI to generate prototypes and mockups from descriptions	Mr. Abhishek Thakur, Knowledge Associate athakur@cdac.in	35 mins	10:15 a.m to 10:50 a.m

			+91 9735950486 C-DAC Hyderabad		
4	**AI-Assisted Coding**	Code completion, bug fixing, and suggestions.	Ms. Jayeeta Choudhury, Project Engineer, jayeetac@cdac.in Ph: +91-8971325089 C-DAC Bangalore	35 mins	10:50 a.m to 11:25 a.m
5	**AI for Automated Testing**	Generating test cases, regression testing, and automating test execution	Mr. Hemanth K, Knowledge Associate, khemanth@cdac.in, Ph: +91-9346088293 C-DAC Bangalore	35 mins	11:25 a.m to 12:00 p.m
6	**Case Study**	All Phases of SDLC	Sadhu Srinivas, Scientist E, sadhur@cdac.in, Ph: 9848252498 C-DAC, Hyderabad	35 mins	12:00 p.m to 12.35 p.m

Day II (27ᵗʰ June 2025)

#	Title	Focus Areas	Resource Person	Duration	Timings
1	**AI in Debugging and Code Security**	Debugging assistance, vulnerability scanning, and static code analysis	Shoubhik Das, Project Engineer, C-DAC Hyderabad, shoubhikd@cdac.in Ph: 9049608396	35 mins	9:00 a.m to 9:35 a.m
2	**Ethical use of AI**	Bias and Fairness Governance and Regulations by Indian Govt. Privacy and Data Protection Accountability matrix Ensuring inclusivity Autonomous systems and safety Unethical use of AI in software applications Introduction to Ethical AI Tools/ services Community building and team activity (if time permits)	Sammak Shinde Project Engineer, sammaks@cdac.in, Ph: +91-9082650437 C-DAC Pune	35 mins	9:35 a.m to 10:10 a.m
3	**AI assisted Documentation**	Introduction to AI assisted documentation and how it is different from traditional documentation, Types of documentation in SDLC, Integration of Doxygen with IDEs/ other platforms, AI for Visual Content and Design - Generating diagrams, flowcharts, or infographics using AI tools, automating layout/ formatting Ensuring inclusivity/ readability,	Atharva Kulkarni, Project Engineer, atharvak@cdac.in , Ph: +91-8554918262 C-DAC Pune	35 mins	10:10 a.m to 10:45 a.m

		Plagiarism checks and respecting IPR, Challenges and limitations, Best practices			
4	**AI for Performance Optimization**	Identifying bottlenecks and improving software performance	Mr Someshwar Baburao Undare, Project Engineer, C-DAC Hyderabad someshwarb@cdac.in Ph No: 8856911700	35 mins	10:45 a.m to 11:20 a.m
5	**AI in Deployment and CI/CD Pipelines**	Automating builds, deployments, and configuration management	Anand Kore Project Engineer, akore@cdac.in , Ph: +91-9881203872 C-DAC Pune	35 mins	11:20 a.m to 11:55 a.m
6	**AI for Monitoring and Maintenance**	Observability, log analysis, and incident response	Anand Kore Project Engineer, akore@cdac.in , Ph: +91-9881203872 C-DAC Pune	35 mins	11:55 a.m to 12:30 p.m