

Srinivas University

Mangalore - India



Atomic Research Centre (ARC)

Centre for Software Security



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1. Purpose of ARC :

Software Security is an area of protecting computer-based solutions from various types of cyber-attacks. It provides Confidentiality, Integrity and Availability to a software system. Recent advancements in technology expose computers to multiple risks such as Cloud Computing risks, Cryptocurrency risks, and State sponsored cyber-attacks. The research center aims to enhance the knowledge in the field of Software Security.

2. Objective of ARC :

- To enhance the knowledge of Securing the Software from diverse Cyber-attacks.
- To research the area of Security by designing and building concepts to strengthen software security effectively.
- To create tools necessary to detect and suggest mitigations for security risks in the software.
- To explore automation opportunities in the software security design processes.

3. Description on Proposed Research :

The members of the research team who are currently working in Security by Design and Security Threat Modeling areas propose to enhance their research in these areas to fulfill the objectives of the proposed centre.

4. Expected Outcome :

- Enhance and create knowledge in the Software Security area.
- Create Threat modeling concepts necessary to identify Software Security Risks.
- Develop methods to capture and present Software Security maturity to stakeholders.
- Identify cost effective ways of creating Secure Software by utilizing automation tools.

5. List of the Team Members :

- (1) Dr.R.Srinivasa Rao Kunte, Research Professor & Coordinator of Research Centre
- (2) Santosh Pai, Research Scholar

6. List of Working Papers :

- (1) Analysis of Automated Threat Modeling platforms of different companies.
- (2) Study of the most Critical Security Vulnerabilities.
- (3) Comparison of Access Control methods in Serverless Cloud Computing platforms.

7. List of related Published Papers in Journals, Proceedings, Book Chapters, Magazines by Coordinator & his/her Group year wise in APA format :

- (1) A Comprehensive Analysis of Automated Threat Modeling solution company: ThreatModeler Software, Inc., communicated to *International Journal of Management, Technology, and Social Sciences (IJMTS)*

Date: 26th May 2022



**Dr.R.Srinivasa Rao Kunte
(Name & Signature of Coordinator)**