

# Call for Papers for May 2019: 2019 ISSESA International Symposium on Software Engineering, Systems and Architecture



International Symposium on Software Engineering, Systems and Architecture ISSESA 2019 is co-located with ICCSPN. Proceedings of full papers of the in IEEE Xplore and other places such as Scopus, titles of papers will be made available in Web of Science linked to ResearcherID and Clarivate Analytics' Publons etc.. The Areas of the symposium are

- Automated reasoning techniques
- Component-based service-oriented systems
- Cloud computing
- Computer-supported cooperative work
- Configuration management
- Data mining for software engineering
- Domain modeling and meta-modeling
- Empirical software engineering
- Human-computer interaction
- Knowledge acquisition and management
- Mobile app development
- Maintenance and evolution
- Model-driven development
- Program synthesis & transformations, automated defect repair
- Program comprehension
- Reverse engineering and re-engineering
- Recommender systems for software engineering
- Requirements engineering
- Specification languages
- Software analysis
- Software architecture and design
- Software product line engineering
- Software visualization
- Software security and trust; data privacy
- Testing, verification, and validation
- Semantic standardization of data
- Agile Methods
- Business Process Design and Deployment
- Requirements Engineering
- Empirical Software Engineering
- Safety-Critical Software
- Program Specification and Modeling Languages
- Software Testing
- Engineering for Quality Requirements
- Human Factors
- Mobile and Web Applications
- Model Driven Development
- Software Evolution and Maintenance
- Mining Software Repositories
- Software Product Lines
- Software Economics and Metrics
- Self-Adaptive Systems
- Security and Privacy
- Software Analytics
- System Modeling and Simulation
- Program Comprehension and Visualization
- Traceability
- End User Development
- Software Evolution
- Software Testing
- Software Metrics
- Software Engineering Practices in Machine Learning and

- Artificial Intelligence Application Development
- Use of ML and AI techniques in SE
- Software Deployment and Operations
- DevOps
- Container-based Software Artifacts
- Dynamic Discovery & Version Management
- Handling Container Image Sprawl
- Green Data-Center Management
- Fault Isolation and Repair
- Software for the Cloud
- Security
- Data Obfuscation
- Application Driven Resource Allocation
- Cross Cloud Deployment
- Performance Engineering for Cloud Apps
- System Verification and Validation
- Support for Service Metering and Billing
- Platform for Services
- Software Engineering Education
- Automated Software Engineering
- Software Engineering and Law
- Program Analysis
- Mining Specifications
- Formal Methods
- software services and process in asynchronous and decentralized engineering
- Novel engineering processes for smart and emergent service systems
- Approaches for software platform support of smart service systems
- Component-based software engineering for self-adaptive systems of cyber-physical systems
- Approaches for the decentral management and computation of service and system composition
- Resilience of smart service ecosystems
- Dependability, privacy, security aspects of smart service systems
- State-of-the-Art regarding (automated) reuse of architecture knowledge
- Industrial experiments and case studies dealing with smart services and platforms
- Smart Service Marketing
- Context Modeling to create value in context within complex service-ecosystems
- Application of formal/semi-formal methods in:
- Linking requirements engineering and software architectures
- Foundational principles of software architecture
- Linking requirements engineering and software architectures
- Quality attributes and software architectures
- Architectural design, analysis and evaluation
- Architecture description languages and meta-models
- Architecture verification and validation
- Management of architectural knowledge, decisions, and rationale
- Cross disciplinary efforts and software architecture
- Architectural patterns, styles and tactics, reference architectures
- Architecture viewpoints and views
- Architecture conformance
- Architecture-based synthesis, code generation
- Architecture transformation and refinement
- Architecture refactoring and reengineering, reverse engineering
- Architecture-based evolution
- Architectures for reconfigurable and self-adaptive systems
- Service-Oriented Architectures (SOA) and Web services,
- Architectures for ultra-large scale, long-lived systems and systems-of-systems
- Software architecture and the cloud
- Software architecture and big data
- Software architecture and virtualization
- Architectures for cyber-physical systems
- Architectural concerns of autonomic systems
- Architecture-centric process models and frameworks
- Software architecture and agility
- Architecture-centric model driven engineering
- Component-based models and deployment, middleware
- Software architecture and system architecture, including software-defined networking
- Software tools and environments for architecture-centric software engineering
- Industrial applications, case studies, best practices and experience reports
- Empirical studies, systematic literature reviews and mapping studies in software architecture.
- Architecture design, validation and verification, quality analysis and evaluation

- Architecture description languages and meta-models
- Architecture-centric model driven engineering
- Architecture-centric process models and frameworks
- Architectural patterns, styles and tactics, viewpoints and views
- Architecture transformation and refinement, architecture-based synthesis
- Architecture-based evolution
- Integrating formal/semi-formal methods and architecture-centric software engineering for:
  - Service-Oriented Architectures (SOA), Web services, and Microservices
  - reconfigurable and self-adaptive systems
  - mobile applications
  - cloud applications
  - mobile cloud applications
  - IoT applications
  - smart systems
  - ultra-large scale, long-lived systems and systems-of-systems
  - Cyber-Physical Systems
  - Distributed and centralized collaborative solutions for the diagnosis and repair of software systems
  - Design for the diagnosability and repairability
- Collaborative Management of NF requirements (quality, security, robustness, availability)
- Monitoring simple and composite architectures, components and services
- Semantic (or analytic) architectural and behavioral models for monitoring of software systems
- Dynamic reconfiguration of CB and SO architectures
- Collaborative planning and decision making
- Collaborative technologies for ensuring autonomic properties
- Predictive management of adaptability.
- Collaborative Management of autonomic properties
- Experiences in practical adaptive and reconfigurable CB and SO applications
- Tools and prototypes for managing adaptability of CB and SO applications
- etc.
- Formal/semi-formal analysis and architecture-centric software engineering provided as a service on the Cloud or in an IoT infrastructure.
- Case studies and experience reports in using formal approaches in software architecture design and analysis.
- Etc.

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Registration for Full Paper \$300 (Short paper 3-4 pages and Full paper 5-6 pages IEEE Paper template <http://icspn.ghsociety.org/template.doc>) This covers presentation and conference participation.

Registration for Abstract Only \$100. (Title, Name of Authors, Affiliation, Abstract and Key words) This covers presentation and conference participation.

**All selected papers further qualified for future advancement/improvement of work-done for Special Issues in reputable Journals and Book Chapters to be indexed in reputable places such as SCOPUS. Authors will be contacted in the future for submissions to these call for papers. All selected abstracts qualify for such invitations.**

**Submission link:** <https://cmt3.research.microsoft.com/ICCSPN2019>

**Website :** <http://icspn.ghsociety.org/>

**Deadline for full papers submission :**

20th May 2019

**Final notification of acceptance :**

25th May 2019

**Deadline for registration :**

27th May 2019

**Deadline for Camera-ready :**

28th May 2019

**Conference date :** 29th to 31th May 2019

**Venue :** Ghana Technology University College, Accra Ghana.