SYSTEMS ANALYSIS AND DESIGN - TOPICS

Theories, Tools and Practices related to Systems Analysis and Design (SA&D) including (but not limited to) the following topics:

- Evolution of Systems Analysis and Design
- Empirical Studies of SA&D methods
- Principles and Methodologies
- Initiating and Planning Systems Development Projects
- Development Life Cycle
- Soft Systems Methodology
- Joint Application Design
- Structured and Object Oriented SAD
- Goal oriented SAD
- Information Engineering
- Expert Analysis and design
- System Life Cycle
- Specification Development
- Requirement Discovery
- Requirement Analysis Paradigm
- Requirement Analysis and Planning
- Implementation and Testing
- Design of Testing
- Testing of Design
- Human Interface Design
- Hardware Interface Design
- Roles in Systems Analysis and Design
- Project Management and Planning
- Tools and Methodologies
- Test data
- Operation and Maintenance
- Maintenance Planning
- Performance Planning
- Documentation Design
- Software Engineering and Implementation
- Automated Tools for SAD
- Intelligent Systems
- CASE
- Unified Modeling Language
- High Level System Design and Analysis using Abstract State Machines
- Emerging Tools for SAD
- Formal methods of SAD
- Application of Expert Systems in SAD
- Intelligent SAD
- Distributed Systems Analysis and Design
- Models and methodology for agent-oriented analysis and design
- Software Quality Management
- Case studies in systems analysis in Design
- Success factors and best practices in SAD
- Requirement Management Practices

Education Aspects of Systems Analysis & Design (SA&D), including (but not limited to) the following areas:

- Evolution of S&D Education
- Issues and prospects in Classroom Education of SA&D
- Issues and prospects in Distance Education of SA&D
- Curriculum Design and Implementation
- Standardized Curriculum
- Teaching Programming and Software Development
- Technologies for SA&D Education - CBT, Multimedia Video and Audio Conferences etc.
- Use of Online Resources - Forums, Virtual Communities, Wikis, Digital Libraries etc.
- Case Studies and Evaluation of SA&D Education
- Exchange of Teaching Materials
- Virtual SA&D Education
- Pedagogical Models for SA&D Education
- Philosophical Issues in SA&D education
- Project Based Education
- Problem Based Teaching and Learning
- Collaborative Groupware
- Group based Teaching and Learning
- Tutorial Design
- Assessment Techniques
- CASE Tools in SA&D Education
- SA&D Research in Classroom
Application specific Analysis, Modelling, Design, Testing, Implementation and Maintenance of systems including (but not limited to) the following areas:

<table>
<thead>
<tr>
<th>Agent Based Systems</th>
<th>Multimedia Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio Engineering System</td>
<td>Intelligent Systems</td>
</tr>
<tr>
<td>Bio Informatics</td>
<td>Speech Processing Systems</td>
</tr>
<tr>
<td>Bio-Authentication Systems</td>
<td>Pattern Processing System</td>
</tr>
<tr>
<td>Identity Management System</td>
<td>Reliable systems</td>
</tr>
<tr>
<td>Network Systems</td>
<td>Maintenance Systems</td>
</tr>
<tr>
<td>E-Government systems</td>
<td>Rapid Application Development</td>
</tr>
<tr>
<td>E-Health systems</td>
<td>Real Time Systems</td>
</tr>
<tr>
<td>Business and E-commerce Systems</td>
<td>Remote Systems</td>
</tr>
<tr>
<td>ERP systems</td>
<td>Robotic Systems</td>
</tr>
<tr>
<td>Database Driven Systems</td>
<td>Security Systems</td>
</tr>
<tr>
<td>Decision Support Systems</td>
<td>Space Mission Analysis and Design</td>
</tr>
<tr>
<td>Distance Education Systems</td>
<td>Virtual Systems</td>
</tr>
<tr>
<td>Expert Systems</td>
<td>WEB based systems</td>
</tr>
<tr>
<td>Fuzzy Systems</td>
<td>Role modelling for agent system analysis, design, and implementation</td>
</tr>
<tr>
<td>Information Systems</td>
<td>Organizational Abstractions for the Analysis and Design of Multi-agent Systems</td>
</tr>
<tr>
<td>Interactive Systems</td>
<td>Designing concurrent, distributed, and real-time applications with UML</td>
</tr>
<tr>
<td>Knowledge based systems</td>
<td>Pre-Built Software Applications</td>
</tr>
<tr>
<td>Management Information Systems</td>
<td>Open Source Software (OSS) Solutions</td>
</tr>
<tr>
<td>Data Ware Housing and Data Mining Systems</td>
<td>commercial off-the-shelf (COTS) applications</td>
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<tr>
<td>Medical Information Systems</td>
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<tr>
<td>Medical Instrumentation</td>
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<tr>
<td>Mobile Systems</td>
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