The SCC research team aims to address most significant shifts in modern IT and service for enterprise applications and information systems which require powerful paradigms to perform large-scale and complex computing. Such paradigms are:
- the concept of service-oriented architecture,
- the emergence of large-scale architectures (Cloud, P2P, Internet of thing, etc.),
- the emergence of social computing as a new dimension to the Web,
- the massive growth in the scale of data or big data.

To meet these goals, the SCC research team focuses on three complimentary Internet based research areas: Service computing, Cloud computing and Social computing.

1. **Service computing**: emphasizes the algorithmic, mathematical and computational methods, models, and technologies along with flexible and adaptive infrastructure for services developments and management in order to facilitate the on-demand integration and formation of services and business processes across different platforms and organizations.

2. **Cloud computing**: shifts the computing infrastructures to the individual users as utilities so that users with relatively low computing knowledge can have a disposal of high performing computing infrastructure (e.g., compute, storage and applications) with little investment.

3. **Social computing**: reflects relationships that people daily experience and empowers individual users with relatively low technological sophistication in using the Web to engage in social interaction, contribute their expertise and share their content, experience and opinion.

Starting from the synergy between the above three areas, the main research directions are:

- **SOA & Cloud computing**: Mathematical foundations and techniques for service creation, development, and management, Linkage between IT services and business services, Web services security and privacy, Trust, Web services agreement and contract, Web services discovery and negotiation, Web services management and adaptation, Web services collaboration, Quality of
Service, Solution frameworks for building service-oriented applications such as e-government, resource sharing, cloud and social services), Business and scientific applications, using Web services and SOA, Business process modeling, integration and management, Standards and specifications of Services Computing, deployment models in the Cloud.

- **Social computing for Web services**: Social networks analysis and mining for Web services discovery and composition, Impact of social interactions on services infrastructures and QoS, Social behavior for Web service lifecycle, Evolution of Web services, Recommendation and social Web services, etc.

- **Social computing for Cloud**: Social network data analysis tools and services on the Cloud, Building Clouds Using Social Networks, Application of social networking in Cloud, etc.

- **SOA and Cloud for Big Data and Social computing**: Exploiting the offer of service-based systems and cloud computing to crunch the big data resulting from social behavior, Developing new efficient and effective big data processing techniques and architectures using Clouds and modern service infrastructures, Social Networks Monitoring Tools As a Service, Big Data services and applications, etc. Big Data in the Cloud integrations with other technologies such as SOA, data mining, machine learning, HPC, cloud storage, multi-clouds and internet of things.