

The 2019 Pre-ICIS SIGBPS Workshop on Blockchain Technologies and Smart Contracts

Workshop Theme: Security and Trust in the Blockchain Era

SIGBPS 2019: December 15, 2019, Munich, Germany (<http://2019.sigbps.org/>)

SIGBPS workshops aim to extend the boundaries of research in business process management and services science by incorporating new elements that have not been sufficiently emphasized in the past. The recent rapid advances in information systems have created both challenges and opportunities to develop new business services via innovative business processes. This workshop promotes theoretical research in business process management and service science.

On one hand, driven by the need to solve practical problems, the business process modeling and automation research has been largely prescriptive. There has been a lack of strong theories in this area, and we believe that it is essential to develop new theories about business process and service automation. On the other hand, more recently blockchain is poised to become the most exciting invention after the Internet; while the latter connects the world to enable new business models based on online business processes, the former will help resolve the trust issue more efficiently via distributed and decentralized computing. While the recent advancements in fintech made blockchain a practical technology, smart contracts are now getting more attention. Smart contracts are essentially a transaction protocol that executes the terms of a computerized contract. The potential business impacts of blockchain and smart contracts are challenging existing business models, leading to fascinating research opportunities in business process and service applications. The purpose of the SIGBPS workshop this year is to provide an interdisciplinary forum to discuss new research directions in the areas of building trustworthy business processes and services with blockchains and smart contract technologies. We have seen testimonial studies on how to examine, design, implement, and deploy solutions based on blockchains and smart contracts to resolve research and practical issues in BPS applications. Such applications may benefit many research frontier domains, for example, information systems in Finance, Supply chain, Education and Healthcare.

This year's workshop will focus on the research and development of blockchain technologies and applications with a workshop theme called "*Security and Trust in the Blockchain Era.*" This theme is to signify the unique capability of blockchain technologies and applications in the enablement of secure and efficient information flows across organizational boundaries, resulting in lower process costs, better business trust, and more novel business collaborations.

Given the nature and purposes of this workshop, we invite research papers of **no more than five pages** that are well articulated and formatted in **single line spacing, Times New Roman, 11-point font, and 1 inch margin all around**. We particularly seek position papers but also welcome conceptual papers with either theoretical or application flavors, as well as research-in-progress papers. Case, empirical, and behavioral studies relevant to the following topics are welcome.

Suggested research topics include, but are not limited to, the following:

- Security issues in blockchain-enabled systems and platforms
- Computational trust in blockchain-enabled systems and applications
- Open collaboration processes and services in blockchain-enabled systems

- Design science research in BPS applications of blockchain-driven smart contracts
- Technical and application solutions for smart contracts and BPS applications
- Empirical studies on blockchain, smart contracts and BPS applications
- Trust, privacy, and behavioral issues in smart contracts under blockchains
- Regulation, governance, and standardization of smart contracts in BPS applications
- BPS applications of contract theory in smart contract management
- Blockchain-driven protocols for BPS smart contracts
- BPS applications with blockchain and smart contracts in healthcare, supply chain, finance, education
- BPS case studies of blockchain and smart contract adoption
- Economics and game theory of smart contracts

The workshop will be organized with special tracks of interests. Researchers with expertise in the above topics are welcome to direct the paper solicitation and reviewing within one track, which might be, but not limited to, one of the following:

- Security and Trust in Blockchain-enabled Systems
- Integration of smart contracts in workflow systems
- Process-centric consensus modeling for DAO
- Service science and engineering in blockchain ecosystems
- Blockchain enabled supply chain processes and finance
- Innovative Blockchain applications in industry

Please email hsubram@fiu.edu, jxu@bentley.edu, and/or rong.liu@stevens.edu if you would like to get more information, or if you are considering to direct the paper solicitation in one of the areas above.

Important dates

Submission deadline: September 30, 2019

Notification of paper acceptance: October 21, 2019

Honorary Chairs:

Edward Stohr, Stevens Institute of Technology, USA

Akhil Kumar, Pennsylvania State University, USA

Conference Chairs:

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Local Arrangement Co-Chairs:

(TBD)

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