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#### Call For Papers

19<sup>th</sup> International GI/ITG Conference on "Measurement, Modelling and Evaluation of Computing Systems"



# MMB 2018 26.02. - 28.02.2018, Erlangen, Germany

### Organized by GI/ITG Technical Committee on "Measurement, Modelling and Evaluation of Computing Systems (MMB)" Conference Homepage: www.mmb2018.de

The technical committee MMB is a major scientific forum in Germany covering all aspects of performance and dependability evaluation of systems including networks, computer architectures, distributed systems, workflow systems, software, fault-tolerant and secure systems. In 2018 the committee again organizes its international conference **MMB 2018**. In addition to its scientific programme on performance and dependability evaluation techniques, it will comprise invited talks, tool presentations, state-of-the-art tutorials, an industrial track, and workshops focusing on hot topics.

## Topics of MMB 2018 include:

### Models and Methods

- Quantitative evaluation techniques related to performance, dependability, security, survivability, realtime constraints, cost, energy-efficiency and combined aspects like performance-security tradeoffs
  - Fault-tolerant system and network design, dependable computing, redundancy techniques, fault modelling, fault injection
- Testing, measuring, benchmarking and monitoring of systems and networks
- → Model parameter estimation, extremal-value and outlier analysis, big data analysis
- → Queueing systems, stochastic Petri nets, stochastic process algebras, Markov chains, non-Markovian models, fluid models, network calculus
- Simulation techniques including rare events, parallel and distributed simulation
- Combination of stochastic modeling and formal methods in engineering
- Model checking and theorem proving in model-driven software development
- Traffic engineering, network planning and optimization
- → Network economics, accounting, tariffing

### Applications

- Computer and software architectures, cloud computing, fog computing, adaptive and self-organizing systems, embedded systems, Internet-of-Things
- → Fault-tolerant systems and networks, safety-oriented and security-oriented architectures
- Communication networks including access, backbone and optical networks, high-speed switching, software-defined networking, network functions virtualization, mobile and wireless networks, sensor networks, vehicular communication
- Peer-to-peer, overlay and information-centric networks, web-based systems, multimedia systems
- Complex networks, social networks, power-law and scale-invariant systems, biochemical systems
- Green IT, energy-efficient systems, future smart energy networks, critical infrastructures
- Workflow and logistic systems, data centers, traffic and transportation systems

### Satellite Workshops and Special Sessions

The MMB 2018 technical program will include special sessions on the topics *Dependability and Industry 4.0* and *SDV/NFV*. Several workshops will be held in conjunction with MMB 2018. Please find more details on the conference web page.

# Tools and Case Studies in all Areas of Application

## **Submission Formats**

**Full conference papers:** Papers must be unpublished and must not be submitted for publication elsewhere. All papers will be thoroughly reviewed by at least three referees on the basis of their originality and their scientific and practical contribution to the state-of-the-art. Papers must be written in English and must not exceed 15 pages (LNCS style). The proceedings will be published in the Springer LNCS series. A best paper award will be provided. Besides full papers **industrial papers and practical experience reports** are also solicited. Reports should not exceed 8 pages (LNCS style).

**PH.D. track papers:** PH.D. students are encouraged to submit a paper on recent achievements. Reports should not exceed 8 pages (LNCS style). Accepted submissions will be published as a technical report of FAU Erlangen-Nürnberg.

**Tool descriptions:** Special sessions will be arranged to present and demonstrate tools relevant to any topic covered by the Call for Papers. Accepted tool descriptions should not exceed four pages and will appear in the proceedings.

**Tutorial proposals:** Please send your tutorial proposals to the conference chair.

## Important Dates (preliminary)

Extended Paper Submission: Tools & Tutorial Submission: Authors' Notification: Final Version: Conference: October 29, 2017 November 6, 2017 December 1, 2017 December 19, 2017 26.02. - 28.02.2018

