



Privatdoz. Igor Konnov PhD

Privatdoz. Dr. Josef Widder

Informal Systems  
<https://informal.systems>  
Thomas-Klestil-Platz 13/811  
1030 Wien  
{igor,josef}@informal.systems

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To whom it may concern,

Informal Systems contributes to an open-source ecosystem of cooperatively owned and governed distributed organizations running on reliable distributed systems. We design, implement, and formally verify distributed systems and protocols, including blockchain systems like CometBFT (using Tendermint consensus) and Cosmos. We have offices in Canada, Switzerland, and Austria. The Austrian branch heavily focuses on formal verification aspects, and employs alumni, previous postdocs, and external associate professors from TU Wien and IST Austria.

Our current focus is IBC, the interblockchain communication protocol, that allows to connect two or more blockchains. Many such protocols are currently developed, and due to the financial incentives, their correctness is of utmost importance. Computer-aided verification promises a high degree of trust in verified protocols and software. While breakthroughs have been made over the recent years that allows us to scale verification to systems of practical sizes, the new interchain protocols impose new semantics, and ask for new verification methodologies. The project LORESAN is thus highly timely and we strongly support its goals.

With Laura Kovacs and Florian Zuleger, the Austrian partners, we have worked together on several research projects, we co-advised a PhD student, and we co-authored several papers on automated verification of distributed algorithms. Igor and Laura were co-PC chairs of CONCUR 2020, the conference on concurrency theory, in Vienna. We stay in close contact with Laura, Florian and their groups and are happy to provide them with input regarding current trends and benchmarks. Also, Igor has worked on BIP with Prof. Joseph Sifakis and they co-authored a paper that was presented at CONCUR 2016. This work constitutes a bridge to the French partners.

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We thus strongly support the application for the project LORESAN.

Best regards,



Josef Widder

Igor Konnov

**Bio:** Igor Konnov is a principal scientist at Informal Systems (Austria), spun off from Interchain Foundation (Switzerland). He is specifying blockchain protocols in TLA+ and developing model checking techniques. Igor is leading research and development of Apache — a symbolic model checker for TLA+ and Quint – an engineer-friendly syntax for TLA+. Before joining Informal Systems and Interchain Foundation, Igor Konnov worked as a researcher at Inria Nancy (France) and as a postdoc at TU Wien (Austria). He received his MSc and PhD in Applied Mathematics and Computer Science from Lomonosov Moscow State University (Russia) in 2003 and 2009. In 2019, Igor received his Habilitation from TU Wien (Austria).

**Bio:** Josef Widder is director of protocol engineering at Informal Systems. He obtained his PhD in computer science from TU Wien (Vienna University of Technology, Austria) in 2004, and has spent his postdoc at Ecole polytechnique and Texas A&M University. He returned to TU Wien in 2011, and became external associate professor (Privatdozent) at the Forsyte group in 2015. Since 2020, he has been working full-time with Informal.