

CONTACT
INFORMATION

Department of Computer Science
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CURRENT
POSITION

Assistant Professor, University of Illinois Springfield, Springfield, IL, US. (August, 2020 to present)

PERSONAL
WEBSITE

xianghuang.org

RESEARCH
INTERESTS

Algorithmic Information Theory, Analog Computing, Theoretical Foundations.

VISITING
POSITION:

Visiting Assistant Professor, Le Moyne College, Syracuse, NY, US. (Sept, 2019 to June, 2019)

EDUCATION

Iowa State University, IA, US.

Ph.D. in Computer Science, 2020,

- Thesis: *Chemical Reaction Networks: Computability, Complexity, and Randomness*
- Advisor: Professor [Jack H. Lutz](#)

Institute of Software, Chinese Academy of Sciences, Beijing, China.

Computer Science, 2009.09 - 2012.06.

- Topic: *Model Checking, Formal Methods, Automata Theory*

Nanjing University, Nanjing, China.

B.E. in Software Engineering , 2005.09 - 2009.06.

CSRG PROPOSAL
RELATED
JOURNAL
PUBLICATIONS

1. Xiang Huang, Titus H. Klinge, James I. Lathrop, Xiaoyuan Li and Jack H. Lutz: Real-Time Computability of Real Numbers by Chemical Reaction Networks. *Volume 18, Issue 1, pp 63-73, Natural Computing (2019). (invited paper).*

CSRG PROPOSAL
RELATED
CONFERENCE
PUBLICATIONS

4. Xiang Huang and Rachel Huls. Computing Real Numbers with Large-Population Protocols Having a Continuum of Equilibria. The 28th International Conference on DNA Computing and Molecular Programming (DNA 28, Albuquerque, NM, Aug 8-12, 2022). (**paper published with UIS undergraduate**)

3. Xiang Huang, Jack H. Lutz, and Andrei N. Migunov. Algorithmic Randomness in Continuous-Time Markov Chains, 2019. In Proceedings of the 57th Annual Allerton Conference on Communication, Control, and Computing.
2. Xiang Huang, Titus H. Klinge, James I. Lathrop. Real-Time Equivalence of Chemical Reaction Networks and Analog Computers. In: Thachuk C., Liu Y. (eds) DNA Computing and Molecular Programming. DNA 2019. Lecture Notes in Computer Science, vol 11648. Springer, Cham.
1. Xiang Huang, Titus H. Klinge, James I. Lathrop, Xiaoyuan Li and Jack H. Lutz. Real-Time Computability of Real Numbers by Chemical Reaction Networks. *In Proceedings of the 16th International Conference on Unconventional Computation and Natural Computation (UCNC)* , June 2017, pp. 29-40.