Huang, Xiang **University of Illinois Springfield**

CONTACT INFORMATION

Department of Computer Science
3115 UHB, One University Plaza
Springfield, IL 62703-5407, USA

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CURRENT POSITION

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

PERSONAL WEBSITE

https://csc.uis.edu/faculty/xhuan5/

RESEARCH INTERESTS

Algorithmic Information Theory, Analog Computing, Theoretical Foundations.

VISITING POSITION:

Visiting Assistant Professor, Le Moyne College, Syracuse, NY, US. (Sept, 2019 to June 30)

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.

JOURNAL PUBLICATIONS

- Xiang Huang, Jack H. Lutz, Elvira Mayordomo, and Donald M. Stull, Asymptotic divergences and strong dichotomy, IEEE Transactions on Information Theory 67 (2021), pp. 6296-6305.
- 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).***

JOURNAL SUBMISSIONS UNDER REVIEW

- Xiang Huang, Titus H. Klinge, James I. Lathrop. Equivalence of Real-Time Computable Numbers in Analog Models. Submitted.
- Xiang Huang, Jack H. Lutz, and Andrei N. Migunov. Algorithmic Randomness in Continuous-Time Markov Chains. Submitted.

Conference Publications

- Xiang Huang, Jack H. Lutz, Elvira Mayordomo, and Donald M. Stull, Asymptotic divergences and strong dichotomy, Proceedings of the Thirty-seventh Symposium on Theoretical Aspects of Computer Science (STACS 2020, Montpellier, France, March 10-13, 2020).
- 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.
- 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.
- 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.
- Xiang Huang and Donald. M. Stull. Polynomial Space Randomness in Analysis. *In Proceedings of the 41st International Symposium on Mathematical Foundations of Computer Science (MFCS)* , August 2016:86:1-86:13.

Awards

- The International Society for Nanoscale Science, Computation and Engineering (ISNSCE) Best Student Presentation Award, at 25th International Conference on DNA Computing and Molecular Programming (DNA25), August, 2019.
- Teaching Excellence Award, 2017, Iowa State University.

Teaching Experience

At UIS

CSC 302 - Discrete Structures	Fall 2020 to present
CSC 482 - Algorithms and Computation	Fall 2020 to present

At Le Moyne College

CSC 175 - Introduction to Algorithms and Program Design.	Fall 2019
CSC 170 - Java Introduction (no prior programming experience)	Spring 2020
CSC 176 - Java Introduction (as a second programming course)	Spring 2020
CSC 276 - Object Oriented Design Using Java	Spring 2020