SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
Faculty of Engineering
Website: https://www.eng.nus.edu.sg/ece/

Area: Microelectronic Technologies & Devices

Host: Dr Si Jia

TOPIC	**:**	**Ising Machine Implementation Using CMOS Oscillators**
SPEAKER	**:**	**Mr Yao Zhaoyang** **Graduate Student, ECE Dept, NUS**
DATE	**:**	**Friday, 23 April 2021**
TIME	**:**	**2.00PM to 3.00PM**
WEBINAR	**:**	**Join Zoom Meeting** https://nus-sg.zoom.us/j/82515928227?pwd=eVJaVmZVaDhTM2tQQ1RmMG56Mk1OUT09 **Meeting ID: 825 1592 8227** **Passcode: 858460**

ABSTRACT

We have been relied on supercomputers to solve most problems. however, these conventional computers based on von-Neumann architecture are not very good at solving combinatorial optimization (CO) problem. One method to solve CO problem is to map it to physical process such that resulting state represents an answer to this problem. Ising Machine's nodes interactions can be described by Ising Hamiltonian, by finding its ground state, the solution of a specific CO problem could be found. In this seminar, an Ising Machine is implemented using CMOS oscillators, and the effects of different parameters have been studied.

BIOGRAPHY

Yao Zhaoyang received his B. Eng. from National University of Singapore in 2017. He is a master student in Electrical and Computer Engineering Department. His research focuses on Ising Computing.

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