

### **OCTOBER** 2023

## NEWSLETTER



### **HKSRA**

#### THE HONG KONG SOCIETY OF ROBOTICS AND AUTOMATION

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# ICBDB 2023

### 2023 International Conference on Big Data and Blockchain

November 17-19, 2023

<u>Xi'an, China</u>

### **Call For Paper**

Big Data:

- $\checkmark$  Knowledge discovery from big data
- $\checkmark$  Fundamental theory for big data

Big Data Management and Applications

Big Data Algorithms, Applications and Services

Blockchain:

- Blockchain and trust management
- Blockchain and Bitcoin security
- Blockchain data provenance
- Blockchain storage management
- Blockchain in social networking



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### 2023 International Conference on Big Data and Blockchain

# **ICBDB** 2023

### Dr. Gautam Srivastava

<u>Brandon University, Canada</u> <u>Senior Member of IEEE</u>

### **Speech Title:**

Blockchain Technology for the Internet of Medical Things

#### Abstract:

The healthcare industry has been at the cutting edge of technology since time immemorial. Hardware, software, medication, surgical procedures; the quality of care available to patients in 2022 has never been better. And yet, the administration and data management underpinning that care is severely lagging behind. In this talk, we will examine how Blockchain Technology may be a game changer for the Medical profession. The technology most commonly associated with Bitcoin could actually transform how we manage electronic medical records (EMR). Deploying EMR using blockchain has the potential to fundamentally disrupt the healthcare industry for good. During this tutorial, we will look at the pros as well as the cons of such implementations. We will dive into current research that is ongoing in this growing field and try to predict future directions this research may take.

## **CMAAE 2023**

2023 3RD INTERNATIONAL CONFERENC<mark>E ON MECHANICAL,</mark> AEROSPACE AND AUTOMOTIVE ENGINE<mark>ERING</mark>

### DECEMBER 8-10, 2023 NANJING, CHINA

### Speaker I

### **Biography:**

Dr. Hai Huang, Professor, School of Astronautics, Beihang University. The editorial board members of Chinese Journal of Aeronautics and Structural and Multidisciplinary Optimization. He got his bachelor, master and Ph.D degrees in 1983, 1986 and 1990 respectively, all from Beihang University, Beijing, China. He ever worked as a post-doctoral fellow on composite joint strength and design in Wichita State University, USA, from June, 1999 to October, 2000. His research areas are concept design of spacecraft, structural optimization, structural control as well as their applications.



#### Prof. Hai Huang

One of His achievements "The theories and algorithm of complex structures" was awarded the first grade Natural Science Prize of China Universities. During the past 15 years he led his team to endeavor in applying the proposed structural optimization theories and the developed software to aerospace engineering, which is great helpful to reduce the spacecraft structural mass. In the area of structural/mechanical vibration control, he developed several kinds of vibration isolation and simulation devices that are used in ground vilifications and tests aiming to space applications. Recent years he, as a team leader and chef designer, works on a student small satellite program (APSCO-SSS) that well combines theoretical study with engineering practice. The work is supported by APSCO (Asian-Pacifica Space Cooperation Organization) and was written in the government white paper 《China Space activities 2016》. The satellite has successfully launched in orbit in Oct. 2021, and a series of space flight tests are still being conducted and near to complete. The results show quite good and exciting.

### **CMAAE 2023** CMAAE 2023

2023 3RD INTERNATIONAL CONFERENCE ON MECHANICAL, AEROSPACE AND AUTOMOTIVE ENGINEERING

#### Theme :

Utilizing high fidelity CFD data into engineering model calculations of rotor aerodynamics

### Abstract:

Propeller, helicopter and wind turbine rotors often have lower performance and experience higher loading in real operation compared to the original design performance. One of the reasons stems from the influences of complex flow turbulence, blade contamination, surface imperfection, airfoil-shape changes and variations of the twist distributions. Engineering models used for designing rotor blade are limited to information derived from blade sectional

### Speaker II



datasets, while details on the three-dimensional blade characteristics are not captured.

In the present talk, a dedicated strategy to improve the prediction accuracy of engineering model calculations will be presented. The main aim is to present an elaborated effort for designing better rotors and for providing a better estimate on the loads in realistic operating conditions. The proposed approach is done by carefully utilizing data from high fidelity Computational Fluid Dynamics (CFD) computations into Blade Element Momentum (BEM) and lifting line methods. It will be demonstrated that the prediction accuracy can be improved by following the recommended guidelines.

### Dr. Galih Bangga