



Dr. Anirban Banik

Department of Civil Engineering, National Institute of Technology Sikkim

Special Session: Soft computing and Computer Aided simulation for Sustainability

Profile: Dr. Anirban Banik is currently affiliated with the Department of Civil Engineering at the National Institute of Technology Sikkim, India. He has been awarded Ph.D. in Civil Engineering from National Institute of Technology Agartala, India. He received his M.Tech and B.E. in Civil Engineering from National Institute of Technology Agartala and Nagpur University, India, respectively.

His areas of specialization are hydro informatics, soft computing, fluid mechanics, separation process, nature inspired algorithm and open channel hydrodynamics. He published several SCI and SCOPUS journal papers, conference papers, and Book chapters with renowned international publishers. Dr. Banik is active as an editorial board member of international journals and technical program committee member of several international conferences. He also served as a reviewer for international journals such as Water Conservation Science and Engineering, IEEE Transactions on Fuzzy Systems, and Civil Engineering and Environmental Systems.

Dr. Banik is member of several professional bodies such as Institution of Engineers (India), International Association of Engineers (Hong Kong), Institute of Research Engineers and Doctors (USA), Industrial Engineering and Operation Management, and International Water Resources Association. He is also a working group member of EWG-EUROPT, EWG-ORD, and IFORS Developing Countries Online Resources Page.

Short description of the SS:

Sustainability is a three-dimensional concept that includes environmental, economic, and social aspects. Real world problems in the context of sustainability are related to uncertainty and vagueness. Soft computing and computer aided simulation techniques can handle the ambiguity and pronounce sustainable and optimal solutions to these complex real world problems. Moreover, soft computing and computer assisted simulation methodologies can help researchers, industry, and policy makers adopt the best solution to satisfy the goal of sustainability. It is a major challenge to select the appropriate soft computing and computer assisted simulation strategy to accomplish this task. The aim

of this special session is to highlight the recent, cutting edge, and novel applications of soft computing and computer simulation in the field of sustainability.

Topic of Interest

Recommended topics include, but are not limited to, the following:

Artificial neural network, Adaptive neuro fuzzy inference system, Artificial intelligence, Machine intelligence, Metaheuristic algorithms, Hydropower, Renewable energy, Solar PV, Bio power, Geothermal power, Ocean power, Wind power, Bio-Informatics, Hydro Informatics, Hydro dynamics, Evolutionary algorithms, Swarm intelligence, Computational intelligence, Computational fluid dynamics, Finite Element analysis, Finite volume analysis, Operational research, Data mining, Hybrid optimization, Bio energy Recycling, Biofuel supply chains, Energy management policy, Energy efficiency, Energy-saving technology, Small hydropower plants, Thermal treatments, Remote sensing, Optimization theory and applications, application in infrastructure engineering and management, Separation process.

WORKSHOP/EXHIBITION/POSTER

Finding Civilization Sanctuary within The Revolutionary Surveillance Technology In The 21st Century

Mr. K.C.Choo

CO2 Networks, Malaysia



PROFILE

Mr. K.C.Choo has been actively involved in I.T. solution industry since The Millennium. He received his Bachelor of Arts in Information Technology from University of Northern Iowa in year 2003. He worked as a database administrator for five years in New York City and returned to Malaysia for I.T. Solution business for good. He is excelled and active in both midsize and SOHO I.T. networking, smart home and office automation deployment. For the past 5 years, he is been actively setup both wired and wireless surveillance, alarm and crowd control system for industrial, quarry and agriculture sites with his professional team. He is truly believed solar powered and wireless long distance surveillance system will be the next big thing for the equator nations, such as Malaysia. Also, in October, he will be an official real-estate agent to accommodate foreigner investors' needs as

“Malaysia – My Second Home” ambassador! Since networking is the key to venture the global market; he is loved to welcome, assist, and perhaps joint venture with any party who is interested in venturing South East Asia market.

In year 2018 the ICO Pattaya conference, Mr. K.C.Choo was involved in The Block Chain Mining Workshop. In 2019, it is an honor for Mr. K.C.Choo again to research and present you another workshop in - The Rise of E-Sports and Video Gaming Industry. In 2020 even in the midst of the global pandemic, once again it is an honor and pleasure to have Mr, K.C.Choo conveniently research and present you another workshop in Smart, green, and sustainable home cum waste management from within daily life. In 2022, our world is steadily and gradually recovering from the global pandemic, once more Mr. K. C. Choo has shown his passions support towards ICICO “Bringing people together” idealistic with another workshop in – Finding the civilization sanctuary within the revolutionary surveillances technology in the 21st Century.

The Surveillance sector has grown massively in recent years and is expected to turn in to the corner stone industry to safe guard our civilization by the mid of century prior to the smart automation and proven A.I. mankind manipulating revolution. The advancement of surveillance tech has play a massive role prior, within and post global pandemic. As a system integrator as well as a hands on installer, the new era of surveillance tech has included deep learning, big data, and Artificial Intelligent feature every possible way to monitor, analyze and improving daily life of mankind. Every year crime rate has skyrocketed due to our “life depending and boundless” social media fake or facts feeds. New generation has fully relied on social media to learn, live, and response to the world with a finger tips on the mouse, keyboard and mobile device without stepping out of the comfort zone. As always, there are pros and cons when technology leading the way. However, finding a sense-making point to apply surveillance technology in physical monitoring and data collecting within our digital and actual world can be challenging.



Dr. Mukhdeep Singh Manshahia

Punjabi University Patiala, Punjab, India

Special Session: Research Methods And Recent Research Trends

Mukhdeep Singh Manshahia is an Assistant Professor at Punjabi University Patiala, Punjab, India. He obtained his PhD in 2016 from Punjabi University Patiala. He is working in Sustainable Computing, Artificial Intelligence, Wireless Sensor Networks, Internet of Things (IoT), Nature Inspired Computing, Energy Harvesting and Renewable Energy Systems. He has edited two books and published 43 International and National Research Papers. He has presented 30 research papers in International and National Conferences/ seminars. He has guided four Master dissertations, 55 undergraduate projects and two Ph.D dissertations. He has 17 years of working experiences at the universities. He is reviewer of many WoS journals. He is a member of Computer Society of India, IEEE and IAENG.

PUBLICATION: Conference Proceedings, Special Issues (Journal) and Books

ICO-2018: <https://link.springer.com/book/10.1007/978-3-030-00979-3>

ICO-2019: <https://link.springer.com/book/10.1007/978-3-030-33585-4>

ICO-2020: <https://link.springer.com/book/10.1007/978-3-030-68154-8>

ICO-2021: <https://link.springer.com/book/10.1007/978-3-030-93247-3>

ICO-2022: <https://link.springer.com/book/10.1007/978-3-031-19958-5>

<https://novapublishers.com/shop/advances-of-machine-learning-in-clean-energy-and-the-transportation-industry/>

<https://onlinelibrary.wiley.com/doi/book/10.1002/9781119798798>

<https://www.sciencedirect.com/book/9780323897853/advances-of-artificial-intelligence-in-a-green-energy-environment>

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<https://www.igi-global.com/book/human-agro-energy-optimization-business/287870#description>

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https://www.mdpi.com/journal/applsci/special_issues/applied_optimization_clean_renewable_energy

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<https://onlinelibrary.wiley.com/toc/14678640/2020/36/1>

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<https://content.iospress.com/journals/intelligent-decision-technologies/11/1>

https://www.mdpi.com/journal/computation/special_issues/ICO_2021

https://www.mdpi.com/journal/algorithms/special_issues/Smart_Algo

https://www.mdpi.com/journal/forecasting/special_issues/CRTF_CMO

<https://link.springer.com/journal/40305/volumes-and-issues/10-4>

<https://www.igi-global.com/book/deep-learning-techniques-optimization-strategies/231554>

<https://www.igi-global.com/book/handbook-research-smart-technology-models/243743>

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<https://link.springer.com/book/10.1007/978-3-319-66984-7>

<https://link.springer.com/book/10.1007/978-3-319-70542-2>

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<https://www.igi-global.com/book/handbook-research-modern-optimization-algorithms/137127>

<https://www.igi-global.com/book/handbook-research-emergent-applications-optimization/179325>

<https://www.igi-global.com/book/research-advancements-smart-technology-optimization/244301>