NEWSLETTER
ROBERT BOSCH CENTRE FOR DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

3rd RBCDSAI Workshop on Recent Progress in Data Science and AI
Saturday, 19th January, 2019 | IIT Madras

RBCDSAI IITM

1ST QUARTER, 2019

Robert Bosch Centre for Data Science and AI **(RBCDSAI)** organized a Workshop on "Recent Progress in Data Science and AI" on January 19, 2019 . The event started with talk by prof. Harish Guruprasad about "Complex tasks in machine learning".

This was followed by a series of presentations from Researchers Priyesh Vijayan, Prasan Shedligeri, Ramya Chandran, Depen Morwani and Varghese Kurian, on topics viz., Designing better Graph Convolutional Networks, Solving computer vision tasks with event sensor based data, Modeling taxi driver decision-making with information sharing platforms and comparison of discrete and continuous control in flow networks. The Sessions were interactive and helped delegates sharpen their saw in Artificial Intelligence and Machine Learning.

Inauguration of RBCDSAI

The Robert Bosch Center for Data Science and Artificial Intelligence (RBC-DSAI) was operational since August 2017, officially inaugurated on 6th February 2019 by Dr.Michael Bolle, CTO and Member of the Board of Management, Robert Bosch GmbH, in the presence of Prof. Bhaskar Ramamurthi, Director, IIT Madras. **The mission of this center is to create societal impact through multidisciplinary interactions with government, academic, research and industrial collaborators on core challenges in Data Science (DS) and Artificial Intelligence (AI)**, said a statement from the Institute.

"Artificial Intelligence is a core technology for all areas of connected life - from connected mobility to buildings, factories, and cities. The expertise of our Indian engineers contributes to expanding the AI skills set of Bosch," said Dr. Michael Bolle, member of Bosch's board of management, during the opening ceremony.

"The center's mandate requires interaction with industry and other universities, including international student and faculty exchanges. The objective is to advance scientific innovation for societal benefit," says Prof. Bhaskar Ramamurthi, Director, IIT Madras.

Applied research will begin in four verticals: manufacturing analytics, financial analytics, smart cities, systems biology and health care. Several technologies currently require large datasets to improve their accuracy and to adapt these technologies for the Indian context.

Prof. B. Ravindran, who heads RBC-DSAI, says, **"The center, in addition to fundamental research, is setting out on an ambitious task of creating a portal of curated, India specific data sets that are easy to access and interpret through a set of open tools and interfaces."**

Academic Research Summit 2019 on Data Science & AI

Microsoft Research India (MSRI), in partnership with the Association for Computing Machinery India (ACMI) and the Robert Bosch Centre for Data Science and AI, IIT Madras, are co-organized the fifth edition of the Academic Research Summit on Data Science and AI on January 24, 2019 - January 25, 2019 in IIT Madras, Chennai.

The Academic Research Summit series is a forum to foster meaningful discussion and discussion among the Indian Computer Science research community and enable collaborations to advance the state of the art and raise the bar on research efforts. This **Academic Research Summit 2019 focused** on the theme of Data Science and AI specially addressed Challenges & Opportunities in AI and Using AI in the industries.

RBCDSAI Workshop on "Measurement-based Optimization in the Presence of Uncertainty"

The Robert Bosch Center for Data Science and Artificial Intelligence organized a 2-day workshop on "Measurement-based Optimization in the Presence of Uncertainty" on March 15 & 16th 2019 . The speakers are**,** Prof. Dominique Bonvin, EPFL, Switzerland and Prof. Shankar Narasimhan and Dr. Sridharakumar Narasimhan, Dept. of Chemical Engineering, IITM. The workshop facilitated collaborative work in the mentioned topic.

Indian Institute of Technology Madras hosted the first Robert Bosch Centre for Data Science and AI (RBCDSAI) 'Web Science Symposium, on 25th & 26th February 2019.

RBCDSAI, IIT Madras hosts the first 'Web Science Symposium'

It is being held jointly with Web Science Trust, which fosters web science studies around the world & coordinates a global network of laboratories

Delivering an address on 'Web Science, AI and Future of the Internet,' Prof. Dame Wendy Hall, Regius Professor of Computer Science, University of Southampton, U.K., and Executive Director, Web Science Institute, said, **"Web architecture is a simple set of protocols, that gave rise to complex macro phenomena. Web is the co-creation between humans who put the content and the technology that enables it. The whole thing is designed for wonderful things but when it goes big, bad things will happen such as cyber bullying and fake news."**

Speaking later, Prof. B. Ravindran, Head, RBCDSAI, IIT Madras, said, **"There are many India-specific challenges that need to be addressed by Web Science. While India has a nascent Web Science community, we need much larger nation-wide efforts to develop solutions tailored to the Indian society. This symposium is an attempt to bring both Indian academia and industry together to enable more active focus on web science research for India. The mission of RBCDSAI includes enabling and studying societal impact of AI and Data Science.**

The web is the vehicle through which much of AI reaches society at large. It is imperative for us to be involved in web science research and enablement."

Some of the technologies include natural language processing, semantic web and ontologies, network science and analytics. RBCDSAI is launching this symposium series to serve as a platform for web science community in India to gather and exchange ideas.
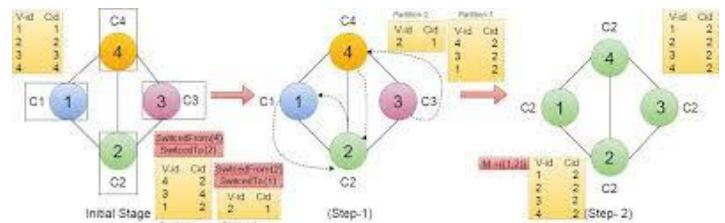
Accomplishments

Best Student Paper Award - Deepak Maurya from RBCDSAI received the best student paper award for the paper titled "Identification of Output-Error (OE) Models using Generalized Spectral Decomposition" presented in the Fifth Indian Control Conference at IIT Delhi, during 9-11 January, 2019.

Mr. Shayantan Banerjee, MS scholar from RBCDSAI secured the first rank in the HSBC AI challenge at Shaastra 2019 held at IIT Madras . He created a web-app that runs an NLP-based model in the background to perform three major prediction tasks. The data used was free-text clinical notes entered by physicians.

RBCDSAI is excited to announce the release of v1.0.0 of DCEIL, the first Distributed Community Detection Algorithm based on the state-of-the-art CEIL scoring function. It comes with GPL v2.0 and thus enables people from both academia and industry to use it in their work.

Upcoming Events

- ❖ **IIT Madras AI Colloquium, 22nd April 2019**
- ❖ **Fourth RBC-DSAI Workshop on Recent Progress in Data Science and AI 10th May 2019**

Reach Us

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