Call for Contributions

- 1. Inform the Chair
- 2. Submission URL:

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICCGI+2021+Special

Please select Track Preference as **SMLAI**

3. Note: For 2021, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.

Special track

SMLAI: Serverless Machine Learning for Intelligent AI Workflow

Chairs

Dr. Dhaval Patel, IBM TJ Watson Research Center, NY, USA pateldha@us.ibm.com

Shuxin Lin, IBM TJ Watson Research Center, NY, USA shuxin.lin@ibm.com

along with

ICCGI: The Sixteenth International Multi-Conference on Computing in the Global Information Technology

https://www.iaria.org/conferences2021/ICCGI21.html
Lily 18, 2021 to July 22, 2021 Nice France

July 18, 2021 to July 22, 2021 - Nice, France

AI Workflow is a "dataset centric" and the characteristic and quality of dataset varies across industries as well as applications. For example, it is common to have "Big noisy data" in Oil and Gas industries as there are many oils pumps installed across geographical space, on the other hand, the data generated by imaging technology are "Wide clean data" (i.e., very less number of records but the number of attributes are very high). Researcher has introduced purpose-built programming model that allows end user to construct a "Pipeline Graph" to create an AI workflow for Automated Model Discovery. The programming interface supports multiple machine learning ecosystems and frameworks, e.g., scikit-learn, Keras, pyearth, XGBoost as part of the same pipeline graph definition. Moreover, using Pipeline Graph we can specify multiple machine learning tasks such as Classification, Regression, Imputation, Time Series Forecasting, Imbalance Learning, Data Sampling, etc. In the race of getting the state-of-the-art result, the data scientists construct a very large Pipeline Graph. Typically, the size of Pipeline Graph varies across applications, across different AI tasks, or even across different persona. In summary, Execution of Pipeline Graph generates bursty workload.

With an emerging Serverless platform offering in industries, for example IBM's Cloud Function and IBM Code Engine (Closed Beta at the time of writing this), there is an emerging need of building a Serverless Machine Learning toolkit to support the seamless execution of Pipeline Graph. The on-demand capability of spinning up resources on Cloud with negligible instantiation using Serverless technology is the center of attraction for AI workload. The focus on this track is to introduce Serverless technology along with how it is leveraged to build next generation Serverless Machine Learning Toolkit.

Topics include, but not limited to

- Data centric approaches;
- Quality of Datasets;
- Pipeline Graphs;

- Big noisy data and Wide clean data;
- On-demand capabilities;
- Artificial Intelligence (AI) workload for Automated Model Discovery;
- Serverless platforms;
- Serverless Machine Learning;
- Serverless Machine Learning Toolkit.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Datelines

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: June 14, 2021 Notification: June 26, 2021 Registration: July 2, 2021 Camera ready: July 3, 2021

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format

- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

Publications

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICCGI+2021+Special Please select Track Preference as SMLAI

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

Contact

Chairs

Dr. Dhaval Patel: pateldha@us.ibm.com

Shuxin Lin: shuxin.lin@ibm.com

Logistics: steve@iaria.org