

## **Workshop on Graphs, Architectures, Programming, and Learning (GrAPL 2019)**

### **Scope:**

Data analytics is one of the fastest growing segments of computer science. Much of the recent focus in Data Analytics has emphasized machine learning. This is understandable given the success of deep learning over the last decade. However, many real-world analytic workloads are a mix of graph and machine learning methods. Graphs play an important role in the synthesis and analysis of relationships and organizational structures, furthering the ability of machine-learning methods to identify signature features. Given the difference in the parallel execution models of graph algorithms and machine learning methods, current tools, runtime systems, and architectures do not deliver consistently good performance across data analysis workflows. In this workshop we are interested in Graphs, how their synthesis (representation) and analysis is supported in hardware and software, and the ways graph algorithms interact with machine learning. The workshop's scope is broad which is a natural outgrowth of the wide range of methods used in large-scale data analytics workflows.

### **Organization:**

#### **General co-Chairs**

Tim Mattson (Intel)

Antonino Tumeo (PNNL)

#### **Program co-Chairs**

Ananth Kalyanaraman (WSU)

Manoj Kumar (IBM)

#### **Steering Committee**

David A. Bader (Georgia Institute of Technology)

Aydın Buluç (LBNL)

John Feo (PNNL)

John Gilbert (UC Santa Barbara)

Mahantesh Halappanavar (PNNL)

Jeremy Kepner (MIT Lincoln Laboratory)

#### **Technical Program Committee**

Aydın Buluç, LBNL, US

Timothy A. Davis, University of Florida, US

Jana Doppa, Washington State University, US

John Gilbert, University of California at Santa Barbara, US

Oded Green, Georgia Institute of Technology & NVIDIA, US

Jeremy Kepner, MIT, US

Arif Khan, PNNL, US

Hao Lu, ORNL, US

Kamesh Madduri, The Pennsylvania State University, US

Rupesh Nasre, IIT Madras, IN

John Owens, University of California, Davis, US

Arnau Prat, Universitat Politècnica de Catalunya, ES  
Jason Riedy, Georgia Institute of Technology, US  
P. Sadayappan, The Ohio State University, US  
A. Erdem Sariyüce, University at Buffalo, US  
Arun Sathanur, PNNL, US  
Brian Van Essen, LLNL, US  
Flavio Vella, Free University of Bozen, IT  
Yangzihao Wang, Tencent, CN  
Marinka Zitnik, Stanford University, US  
Jaroslaw Zola, University at Buffalo, US