# Yuping Lu

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#### **EDUCATION**

### The University of Tennessee, Knoxville, TN

Aug. 2013 - Present

Ph.D. student in Computer Science

Research Interests: Graph Algorithms, Machine Learning

Advisor: Dr. Michael A. Langston | GPA: 3.91

# Nanjing Agricultural University, Nanjing, Jiangsu Province, China

Sept. 2007 - May 2011

BEng in Computer Science

Advisor: Dr. Huanliang Xu | GPA: 3.64

#### EXPERIENCE

# Graduate Research Assistant at ARM Data Center

Oct. 2017 - Present

Oak Ridge National Laboratory

- NEXRAD data classification using deep learning models.
- Detecting outliers in streaming time series data from ARM distributed sensors.

# Graduate Research Assistant at Office of Information Technology

July 2014 - Oct. 2017

The University of Tennessee, Knoxville

- University web server configuration and optimization.
- Google Search Appliance administration and implementation.

# Research Intern at the Scientific Data Group

Oak Ridge National Laboratory

Developed pbdR tools for singularity container.
 Implemented an R package pbdADIOS to connect R with ADIOS
 May 2016 - Aug. 2016

# Graduate Research Assistant at **Dr. Michael A. Langston's lab** *The University of Tennessee, Knoxville*

Aug. 2013 - June 2014

• Upgraded GrAPPA which is a web-based interface for graph theoretical tools.

# Implementation Engineer at ZTEsoft(Now Rebranded to Whale Cloud)

July 2011 - May 2012

Nanjing, Jiangsu Province, China

### **PRESENTATION**

A Robustness Metric for Biological Data Clustering Algorithms [3]. ISBRA 2018, Beijing, China, June 10, 2018

## R PACKAGES

- biclique: Maximal Biclique Enumeration in Bipartite Graphs
- pbdADIOS: an R wrapper for ADIOS

### **TECHNICAL SKILLS**

Programming languages: C/C++, Python, R, PHP, HTML+CSS+JS Softwares: PyTorch, Jupyter, NumPy, NetCDF, Git, LaTeX

HPC experience: ORNL CADES, LBNL NERSC

### **ACTIVITIES AND AWARDS**

Graduate Student Senate Travel Award, the University of Tennessee, Knoxville.	2018
Reviewer for the 9th International Workshop on Algorithms and Computation.	2015
Reviewer for the 9th International Workshop on Frontiers in Algorithmics.	2015
Student Volunteer for XSEDE14: Atlanta, GA, USA.	July 13-18, 2014
Department excellence award, the University of Tennessee, Knoxville	2013
Outstanding graduate and several scholarships, Nanjing Agricultural University	2007 - 2011

### **PUBLICATIONS**

- 1. The Effect of Clique Selection on Paraclique Cluster Validity: An Experimental Analysis **Yuping Lu**, Charles A. Phillips, Elissa J. Chesler, Michael A. Langston *BMC Research Notes To be submitted*.
- Biclique: Maximal Biclique Enumeration in Bipartite Graphs Yuping Lu, Charles A. Phillips, Michael A. Langston BMC Research Notes — To be submitted.
- 3. A Robustness Metric for Biological Data Clustering Algorithms **Yuping Lu**, Charles A. Phillips, Michael A. Langston *BMC Bioinformatics Under Review*.
- 4. Detecting Outliers in Streaming Time Series Data from ARM Distributed Sensors Yuping Lu, Jitendra Kumar, Nathan Collier, Michael A. Langston
  Proceedings of the 2018 IEEE International Conference on Data Mining Workshops (ICDMW 2018).
- 5. Enrichment vs Robustness: A Comparison of Transcriptomic Data Clustering Metrics **Yuping Lu**, Charles A. Phillips, Michael A. Langston *BMC Bioinformatics 17 (10), 297, August 2016*.
- 6. Digital Gene Expression Profiling of the Phytophthora Sojae Transcriptome Wenwu Ye, Xiaoli Wang, Kai Tao, **Yuping Lu**, Tingting Dai, Suomeng Dong, Daolong Dou, Mark Gijzen, Yuanchao Wang Molecular Plant-Microbe Interactions, 24(12):1530–1539, December 2011.

## REFERENCES

Michael A. Langston
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The University of Tennessee, Knoxville
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Jitendra Kumar
Research Scientist
Climate Change Science Institute
Oak Ridge National Laboratory
Email: kumarj@ornl.gov