

**NEREN Seminar:
“Bridging the Gap --Advancing Regional Collaboration
and Research IT Collaboration”**

Sponsored by Markley, Red River and Cray, Inc.

Friday, April 6, 2018, 9:30AM– 3:00PM

Complimentary breakfast begins at 9:00 a.m.

(Registration/Breakfast – 9:00AM – 9:45AM)

Complimentary lunch begins at 12 noon

Markley, One Summer Street Facility, Boston, Massachusetts

NEREN Seminar –Friday, April 6, 2018, 9:00AM-3:00PM

In collaboration with UMass Amherst and the Massachusetts Green HighPerformance Computing Center (MGHPCC), NEREN presents the fourth in a series of day-long seminars devoted to proposing and advancing ideas for regional collaboration in research computing and networking. By attending in person, you will gain the added benefit of interpersonal networking with peers from across the Northeast region.

Please register by April 3, 2018 to attend in person or remotely by contacting Laurie Robinson, NEREN Program Administrator, at laurie@neren.org or by phone: 401-523-5107. When registering, please indicate whether you are attending in person or remotely. Also, please contact Laurie if you have questions.

Please note the “Getting There” details listed below.

AGENDA – Friday, April 6, 2018

9:00 – 9:45 a.m. Registration/Continental Breakfast/Networking Sponsored by Markley, Red River and Cray Inc.

9:45 – 10:00 a.m. Welcoming/Opening Remarks by NEREN, Inc., Jeff D. Markley, CEO, Markley and Paul Krein, CTO, Red River

Please note that the Webcast/Phone options will be available for the presentations only and not the breakout sessions. If joining by webcast, please use the following link:

<http://demo.mediasite.oshean.org/Mediasite/Play/3088e896b0c04e6aa60e20ac354633a01d>

10:00 – 10:40 a.m. Presentation #1 – *“Improving Integration of Science DMZs in the Northeast”*
Presenter: John Goodhue, Executive Director, Massachusetts Green High Performance Computing Center

In the Fall 2017 NEREN seminar, we heard talks on the ability of Science DMZ to advance research and support "data access equality" across large and small research institutions. During the breakout sessions, we talked about steps that might be taken toward better integration of existing Science DMZ sites in the Northeast, and for simplifying addition of new sites. This update will review progress to date, and possible next steps.

10:40 – 11:20 a.m. Presentation #2 – *“Northeast Storage Exchange”*

Presenter: Saul Youssef, Research Associate Professor, Boston University, Carnegie-Mellon University

Those who know of the Massachusetts Green High Performance Computing Center (MGHPCC) probably appreciate the uniqueness of the facility. The presence of major research computing equipment from Boston University, Harvard University, MIT, Northeastern University and UMASS all a few feet from each other makes MGHPCC a uniquely attractive location for potential new shared cyberinfrastructures. The first really large shared project like this is just about to make a first deployment at MGHPCC. This is the Northeast Storage Exchange (NESE: pronounced like the Scottish lake monster). NESE is a large "data lake" to be built and operated by the above MGHPCC consortium universities. We will discuss the motivations for NESE, plans for growth, partnership with RedHat, potential partnerships with local and national research projects, regional universities, with other regional technology companies and with others. We will describe the implications for networking at MGHPCC and show our plans for operations and a starter 8 PB deployment which is about to begin. NESE is funded by the U.S. National Science Foundation award number 1753840.

11:20 – 12:00 p.m. Presentation #3 – *“Trends in the Convergence of AI and HPC”*

Presenter: Ted Slater, Global Head, Scientific AI and Analytics, Cray

As AI, and in particular Deep Learning, continue to grow in popularity, many organizations are faced with a bewildering array of choices as they make the move from AI pilots to production. This talk will provide important information to those who are ramping up their AI efforts and want to make smart choices to mitigate their risk and gain maximum benefit from these powerful technologies.

12:00 – 1:10 p.m. Lunch Break (Sponsored by Markley, Red River and Cray Inc.) and Tour of Markley, One Summer Street ***(If you would like a tour, we will have two (2) Options -- 12 p.m. or 12:30 p.m.; Sign Up Details will be provided during the onsite registration process).***

1:20 – 2:20 p.m. Breakout sessions – Details to follow. ***(The breakout sessions will not be available by Webcast/Phone).***

2:20 – 3:00 p.m. Closing Remarks Christopher Misra, Interim Deputy CIO, UMass Amherst, Paul Krein, CTO, Red River and Jeff D. Markley, CEO, Markley

To register, or if you have questions, please email Laurie Robinson, NEREN Program Administrator, at laurie@neren.org or by phone: 401-523-5107.

GETTING THERE -- DETAILS

Getting There in Person

The following link provides details about the location for those traveling to the meeting by car:

<https://www.google.com/maps/place/1+Summer+St,+Boston,+MA+02110/@42.3546992,-71.0624595,17z/data=!3m1!4b1!4m5!3m4!1s0x89e37082e4dde52b:0x3386439b15db2a20!8m2!3d42.3546992!4d-71.0602708>

The entrance to Markley is located on the corner of Chauncy and Summer Street. The address is One Summer Street. When you enter, you must go to the Security Desk where you will be signed in and will receive a badge with your name and company name. Please register by April 3, 2018, by contacting Laurie Robinson at laurie@neren.org or 401-523-5107, so that your name will appear on the registration listing that Security will have. Once you have signed in, Security will escort you to the 3rd floor where the seminar is being held. The landmarks you will see at this location are CVS on the Chauncy Street side and Citizens Bank on Summer Street. You will also see the Macy's sign on top of this building so you will know you are in the right place.

Helpful Telephone Numbers/Contact Information

John Griffin, (UMass-Amherst) 413-545-9939 or jgriffin@umass.edu

Laurie Robinson, (NEREN) [401-523-5107](tel:401-523-5107), laurie@neren.org

For Technical Questions: Jim Carr, Consultant, OSHEAN, 401-447-5600, jim@oshean.org

Meeting Location/Wireless Internet Access

Markley does have a guest wireless network.

Parking/Public Transportation

Parking can be found next to Markley at the Lafayette Garage

<http://www.pilgrimparking.com/boston-parking-garages/lafayette-garage.htm>. Markley is just a short walk from South Station and is adjacent to Downtown Crossing T stop. Parking for the day is not complimentary. Please also note that the closest "T" stop is Downtown Crossings. There is also parking at 33 Arch Street.

Getting There Remotely – Phone/Webcast

<http://demo.mediasite.oshean.org/Mediasite/Play/3088e896b0c04e6aa60e20ac354633a01d>

If you are planning to participate in the Webcast, please contact Laurie Robinson–

laurie@neren.org by April 3, 2018. Please note that the Webcast will be recorded, and we will provide details following the seminar. Thank you to David Marble, President and CEO of OSHEAN for assisting with the Webcast/Video Streaming!

About our Presenters

Jeff D. Markley

Chief Executive Officer -Markley

Welcoming and Closing Remarks

Mr. Markley has overseen the purchase and development of thirteen data center and telecommunications buildings in Europe and North America, valued at over \$1 billion and totaling over 3M sq. ft. Throughout his career, Mr. Markley has completed more than 500 real estate transactions for major national and international mission critical clients, appeared in more than 50 major publications, and has been cited many times in the Wall Street Journal as the leading real estate developer in the telecommunications and data center industries. Mr. Markley graduated with a Bachelor of Business Administration in business from the University of Georgia.

Paul Krein
CTO - Red River
Welcoming and Closing Remarks

Paul Krein is the CTO at Red River. He leads the technology strategy for Red River, leads the strategic solution and technology investment directions, and works with executives and technology leaders to understand the art of the possible, assess impacts of leading trends, and evaluate the economic changes in delivering data and computational capacity at scale. Red River teams design and architect, build and run solutions for Healthcare/Lifesciences, Retail, Education and Government missions and infrastructure enabling greater efficiency and higher scale. He is a change agent, has opened new markets throughout his career, and has lead sales, management and business operations functions. Paul holds an M.B.A from the Simon School in Finance and Organizational Strategy, and a B.S. in Electrical Engineering from the University of Rochester

Christopher Misra
Interim Deputy CIO, UMass Amherst
Welcoming/Breakout Sessions/Closing Remarks

Christopher Misra is the Interim Deputy CIO with the University of Massachusetts Amherst where he has worked for many years. His responsibilities include management of overall campus technology coordination, networking, data centers, information security program, identity management, and enterprise architecture. Chris has been active for many years with various regional and national information security organizations including the Security Task Force, Internet2 Salsa, and REN-ISAC, serving on program committees, chairing working groups, and presenting at conferences. Chris is also an instructor at UMass where he has taught undergraduate courses on Network Security for many years.

John Goodhue
Executive Director, MGHPCC

John Goodhue is the Executive Director of the Massachusetts Green High Performance Computing Center (MGHPCC). The MGHPCC is dedicated to supporting the growing scientific computing needs of faculty-driven research at MIT, University of Massachusetts, Boston University, Northeastern University, and Harvard University. John is a business and technical leader with 30 years of experience in networking and high performance computing. John has held senior engineering management, general management, and technology leadership positions at Cisco Systems, where he led the development and marketing of Internet routers for service providers, and BBN Technologies, where he led projects to develop Internet routing and High Performance Computing technologies. He has also been on the early management teams for several Boston-area startup companies. John holds a B.S. in Computer Engineering from the Massachusetts Institute of Technology.

Saul Youssef
Research Associate Professor, Department of Physics
Boston University

Saul Youssef is a Research Associate Professor in the Department of Physics at Boston University. He is a member of the ATLAS collaboration, one of the two major experiments at the Large Hadron Collider at CERN, and is the director of one of the four U.S. ATLAS LHC Tier 2 centers - the Northeast Tier 2 Center, located at MGHPCC. Before coming to Boston, Saul worked at Cornell University, Fermilab and the Supercomputer Computations Research Institute. He received his Ph.D. in Physics from Carnegie-Mellon University. Saul is the Principal Investigator of the Northeast Storage Exchange project.

Ted Slater
Global Head of Scientific AI & Analytics

Ted Slater is currently the Global Head of Scientific AI & Analytics. Previously he has held senior roles in several large pharmaceutical companies, content providers, and biotechnology startups, including Pfizer, Merck, and Thomson Reuters. Ted is an expert in the application of artificial intelligence and semantics-based methods to pharmaceutical R&D and similar areas. He holds an M.A. in Molecular Biology from the University of California at Riverside, and an M.S. in Computer Science from New Mexico State University, and is based in Northwestern Lower Michigan.

About our Sponsors

MARKLEY

Headquartered in Boston, Markley delivers the predominant cloud and data center offerings, including enterprise-class, on-demand Infrastructure-as-a-Service solution that helps organizations maximize IT performance, reduce upfront capital expenses, increase speed to market, and improve business continuity. In addition, Markley has 100 percent uptime, backed by the industry's best Service Level Agreement



Red River www.redriver.com

Red River brings together the ideal combination of talent, partners and products to disrupt the status quo in technology and drive success for business and government in ways previously unattainable. Red River serves organizations well beyond traditional technology integration, bringing more than 20 years of experience and mission-critical expertise in security, networking, analytics, collaboration, mobility and cloud solutions. Red River delivers ongoing IT consulting, maintenance and support to ensure optimal success through an array of unique service offerings, including integrated Managed, Professional, Technical and Support Services. Whether you need help answering simple end-user inquiries with our 24x7x365 Network Operations Center, need to develop a path to the cloud, or implement new network security protocols, our certified experts are available to help. Learn more at redriver.com



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