

JUSTIFICATION FOR SOLE SOURCE (Simplified Acquisitions <\$150K)

The service or material listed on N0016116RCZ0817 is sole source and competition is precluded for reasons indicated below. There are no substitutes available for this material or service.

Restricted to the following source

Manufacturer: University of Maryland Baltimore County (UMBC)

Manufacturer POC & phone #: Stanley Jackson, 410-455-1336

Mfr. Address: 1000 Hilltop Circle, Baltimore, MD 21250

Dealer / Rep / Recommended source:

Dealer / Rep / Recommended source address / phone #:

 X Description of the item or service required, the estimated cost, and required delivery date.

United States Naval Academy (USNA), Office of Research and Scholarship requires University of Maryland, Baltimore County (Dr. Zhiyuan Chen) support to continue developing and testing algorithms for Rya, a RDF triple store, as part of USNA's (Prof. Crainiceanu's) research project "Rya datastore enhancements for Notice to Mariners Datastore Capabilities and Services". University of Maryland Baltimore County has been awarded NAVSUP FLC Norfolk contract in FY2015 to work on the related project "Efficient Query Algorithms and Database Scalability." This is a continuation of that project. The original contract was N00189-15-P-0952.

Algorithms for federated search over multiple Rya instances and single node version of Rya that operates in an offline/disconnected intermittent and limited mode will be developed. The theoretical portion of the research including algorithms design and prototyping, together with software development, performance testing and performance comparison with other approaches, will be largely carried by the Principal Investigator (PI) Zhiyuan Chen and UMBC, with weekly meetings with Prof. Crainiceanu. Period of performance: 01 July 2016 through June 30, 2017 with a cost of [REDACTED] with an option from July 1, 2017 to September 30, 2017 with a cost of [REDACTED] for a total cost of [REDACTED]

 X Specific characteristics of the material or service that limit the availability to a sole source / brand name (unique features, function of the item, etc.). Describe in detail why only this suggested source / brand name can furnish the requirements to the exclusion of other sources / brands.

Dr. Chen is a recognized expert in the area of database research that is necessary for the continued development of the research project "Rya datastore enhancements for Notice to Mariners Datastore Capabilities and Services". Due to his previous research in database field and his participation in the project "Efficient Query Algorithms and Database Scalability" in FY2015, he has intimate knowledge of the scientific and system requirements of the research program, and is uniquely suited to assist the USNA researchers in advancing Rya analysis and prediction.

Dr. Chen has made several significant contributions to this research effort in the area of developing algorithms, semantic base search and efficient query processing and query optimization and is intimately familiar with the USNA analysis requirements; therefore, Dr. Chen's ongoing support for this project is vital to its success.

CHECK & FILL IN ALL APPLICABLE BLANKS BELOW

The requested material or service represents the minimum requirements of the government.

The material/service must be compatible in all aspects (form, fit and function) with existing systems presently installed/performing. Describe the equipment/function you have now and how the new item/service must coordinate, connect, or interface with the existing system.

A patent, copyright or proprietary data limits competition.

These are "direct replacements" parts/components for existing equipment.

Other information to support a sole source / name brand buy:

The continued support of Dr. Chen is necessary to maintain consistency and uniformity in the research analysis and results. Utilizing the services of another contractor would require extensive re-work to Dr. Chen's contributions that have already been made, resulting in a lengthy delay in the completion of the research project.

I CERTIFY THAT STATEMENTS CHECKED, AND INFORMATION PROVIDED ABOVE, ARE COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THE PROCESSING OF THIS SOLE SOURCE / BRAND NAME JUSTIFICATION PRECLUDES THE USE OF FULL AND OPEN COMPETITION.

Signature

[Redacted Signature]

Title

Associated Prodes.

Activity

Date

4/20/2016

Contracting Officer Signature

[Redacted Signature]

Date

6/15/16

SAP Sole Source /Brand Name