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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	DATA				
		Name		Execution Date	
RAHUL IYER				06/25/2013	
HAI QIAN				06/25/2013	
SHENGWEN YANG				06/29/2013	
CALEB E. WELTON				06/25/2013	
RECEIVING PARTY D	ΑΤΑ				
Name:	EMC C	ORPORATION			
Street Address:	176 SO	176 SOUTH STREET			
City:	НОРКІ	HOPKINTON			
State/Country:	MASSA	MASSACHUSETTS			
Postal Code:	01748	01748			
Property Type					
Property Type		Number			
Application Number:		Number 14963061			
Application Number: CORRESPONDENCE Fax Number:	DATA	(408)973-2595			
Application Number: CORRESPONDENCE Fax Number: Correspondence will	DATA be sent to	14963061 (408)973-2595 • the e-mail address first; if that i			
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ASSIGNMENT

WHEREAS, wc, Rahul Iyer, Hai Qian, Shengwen Yang and Caleb E. Welton

(Inventors/Assignors) have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled

A GENERAL FRAMEWORK FOR CROSS-VALIDATION OF MACHINE LEARNING ALGORITHMS USING SQL ON DISTRIBUTED SYSTEMS

the specification of which:

[] is being executed on even date herewith and is about to be filed in the United States Patent Office;

[X] was filed on June 29, 2013 as U.S. Application No. 13/931,879;

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application. together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein:

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts

PATENT REEL: 037242 FRAME: 0516

which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

PATENT/Joint Assignment Attorney Docket Nu.: E093-1642USUS EMC Docket No.: EMC-13-0199(PRO)ORD25

Date: June 25, 2013

avenior's Signature

Print full name of first inventor: Residence: Citizenship: Mailing Address: Rahol Iyer US IN 714 Bounty Drive, Apt. 1406 Foster City, CA 94404

STATE OF <u>California</u> COUNTY OF <u>San Mateo</u>

On this 25 day of 32. All of 2013, before me appeared Rahul lyer who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) isfare subscribed to the within instrument and acknowledged to me that he she like executed the same in hisfheritheir authorized capacity(ies), and that by hisfheritheir signature(s) on the instrument the person(s), or the entry upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY onder the laws of the State of California that the foregoing paragraph is true and correct:

WITNESS my hand and official seal,



Notary Public

Print Name: <u>Catherine F. Beaulieu</u> My Commission expires <u>05 / 18 / 16</u>

PATENT/Joint Assignment Attorney Docket No.: E003-1642USUS EMC Docket No.: EMC-13-0199(PRO)ORD25

Date: June 25, 2013

nventor's Signature

 Print full name of second inventor:
 Hai Qian

 Residence:
 US

 Citizenship:
 CN

 Mailing Address:
 329 Laure

329 Laurie Meadows Dr., Apt. 109 San Mateo, CA 94403

STATE OF <u>California</u> COUNTY OF <u>San Maleo</u>

On this 25 day of ______. 2013, before me appeared Hui Qian who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is the subscribed to the within instrument and acknowledged to me that he sketthey executed the same in his the mitric authorized capacity(ies), and that by his there is signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is mie and correct.

WITNESS my hand and official seal.



<u>a</u>, *

Notaty Public

Print Name: <u>Catherine F. Benahca</u> My Commission expires <u>05718716</u>

PATENT/Joint Assignment Attorney Docket No.: E003-1642USUS EMC Docket No.: EMC-13-0199(PRO)ORD25

Date: June <u>29</u>, 2013

Shengnen Yang

Inventor's Signature

Print full name of third inventor:

Residence:

Citizenship:

Mailing Address:

CN Room 801, Building 7 Jin Dian Hua Yuan, Haidian District, Beijing 100082, China

Shengwen Yang

CN

Witnessed: Tao MA Witnessed: Livong Jian Signature Signature Tao Ma Livong Jian Printed Name Printed Nam

PATENT REEL: 037242 FRAME: 0520

PATENT/Joint Assignment Attorney Docket No.: E003-1642USUS EMC Docket No.: EMC-13-0199(PRO)ORD25

Date: June <u>25</u>, 2013

Javentor's Signature

Print full name of second inventor: Residence: Cuizeaship:

Mailing Address:

Caleb E, Welton US US 744 Edgewater Bivd. Apt. 301 Foster City, CA 94404

STATE OF <u>California</u> COUNTY OF <u>San Mateo</u>

On this 2^{5} day of ______. 2013, before me appeared Caleb E. Welton who proved to me on the basis of satisfactory rvidence to be the person(s) whose name(s) is two subscribed to the within instrument and acknowledged to me that he instrument the person(s), or the entity upon behalf of which the person(s) acted, here the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Notary Public

Print Name: <u>Cathering F. Beaulieu</u> My Commission expires <u>05</u> / <u>18</u> / <u>16</u>