505774718 11/14/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5821536

UBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ATA			
		Name	Execution Date	
JING XU			10/16/2019	
SI ER HAN			10/16/2019	
STEVEN GEORGE BAR	BEE		10/24/2019	
XUE YING ZHANG			10/16/2019	
JI HUI YANG			10/16/2019	
RECEIVING PARTY DA	ТА			
Name:		IATIONAL BUSINESS MACHINES CORPOR	RATION	
Street Address:	NEW ORCHARD ROAD			
City:	ARMON	IK		
 State/Country:	NEW YORK			
2				
Postal Code:	10504			
Postal Code: PROPERTY NUMBERS Property Type		Number		
PROPERTY NUMBERS	Total: 1	Number 16684396		
PROPERTY NUMBERS Property Type Application Number:	Total: 1			
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PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	Total: 1 Total: 1 ATA (e sent to provided; f	16684396 512)370-2850 the e-mail address first; if that is unsucce ; if that is unsuccessful, it will be sent via 512-370-2832 rvoigt@winstead.com BM CORP. (WSM) C/O WINSTEAD P.C. P.O. BOX 131851 DALLAS, TEXAS 75313		
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PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: TTORNEY DOCKET NU AME OF SUBMITTER:	Total: 1 Total: 1 ATA (e sent to provided; f i F i	16684396 (512)370-2850 the e-mail address first; if that is unsucces; if that is unsuccessful, it will be sent via 512-370-2832 voigt@winstead.com BM CORP. (WSM) C/O WINSTEAD P.C. P.O. BOX 131851 DALLAS, TEXAS 75313 P201903169US01 ROBERT A. VOIGT, JR.		

Total Attachments: 6

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DECLARATION (37 C.F.R. § 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. § 1.76) AND ASSIGNMENT

Title of Invention: IDENTIFYING OPTIMAL WEIGHTS TO IMPROVE PREDICTION ACCURACY IN MACHINE LEARNING TECHNIQUES

As a below named and undersigned inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.

Whereas, I ("ASSIGNOR") have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;

Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

Page 1 of 2

PATENT REEL: 051014 FRAME: 0224

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I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and an unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 2019.10.16
Date: 2019. 10, 16
Date:7019.10_16

(5) Legal Name of Inventor: Ji Hui Yang

Signature:

Page 2 of 2

PATENT REEL: 051014 FRAME: 0225

Date:

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Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

Page 1 of 2

PATENT REEL: 051014 FRAME: 0226

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

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Signature:	Date:
(1) Legal Name of Inventor: Jing Xu	
Signature:	Date:
(2) Legal Name of Inventor: Si Er Han	
$\Gamma - \rho /$	
Signature: NWEHallen	Date: 240ct 2019
(3) Legal Name of Inventor: Steven George Barbee	
Signature:	Date:
(4) Legal Name of Inventor: Xue Ying Zhang	
Signature:	Date:
(5) Legal Name of Inventor: Ji Hui Yang	

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PATENT REEL: 051014 FRAME: 0227

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DECLARATION (37 C.F.R. § 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. § 1.76) AND ASSIGNMENT

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Page 1 of 2

PATENT REEL: 051014 FRAME: 0228

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Signature		Date.	
(1) Legal Name of Inventor: Jing Xu			
Signature		Date	
(2) Legal Name of Inventor: Si Er Han			
Signature:		Date	
(3) Legal Name of Inventor Steven Geo	rge Barber		
Signature		Date:	
(4) Legal Name of Inventor: Xue Ying Z	hang		
Signature: Ji Hui Yan	nz	Date: 201	8.10.16

(5) Legal Name of Inventor: Ji Hui Yang

Page 2 of 2

PATENT REEL: 051014 FRAME: 0229

RECORDED: 11/14/2019