PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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VIJAYALAKSHMI SRINIVASAN	09/08/2017
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15699320

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ATTORNEY DOCKET NUMBER: YOR820162719US01	
NAME OF SUBMITTER:	GEOFFREY K. PECHIE
SIGNATURE:	/Geoffrey K. Pechie/
DATE SIGNED:	09/12/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 2

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> **PATENT** REEL: 043830 FRAME: 0001 504543487

IBM DOCKET NUMBER: YOR820162719USD)

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: DEEP NEURAL NETWORK PERFORMANCE ANALYSIS ON SHARED MEMORY ACCELERATOR SYSTEMS

As a below named inventor, I hereby declare that:

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

[X] United States application or PCT international application number 15/699,320 filed on September 8, 2017

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 CFR Section 1.56.

Whereas, the undersigned inventor(s) has/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, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned inventor desires to grant to IBM, the 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, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the 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, reasonations renewals, COCKERS, COUNTRIES, Substitute, and extensions themes, and all regions principles are the filing of such applications and granting of such paterior, to paginous each make agree inventor basely. automics and requests the Director of the Council States Pagest and Transmiss Cities to consist any United States Patent, and foreign patent outborness or issue any town to page at granted on the foreigns, or \$88. its successors, legal representatives, and assigns, the entire score being legal, talk, and interest in the tie success to the half and employed by TDM, the successory people appropriate and accompanies to the full end of the terms for which any and all such patents may be granted as fully and entires as would have been held and encoved by the undersigned had the Assignment problem made, and each undersigned investor A CONTRACTOR AND AND AN ARCHITECTURE AND ARCHITECTURE AND ARCHITECTURE AND ARCHITECTURE AND ARCHITECTURE AND A recording the Assistance of perfecting title to the language and a second process and applications in DM to succeed the experience of the succeeding the representatives, or according

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Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants IBM, 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.

(i) Legal Name of Inventor: Jungwook Choi	
Signature:	Date: 09/08/2013_
(2) Legal Name of Inventor: Vijayalakshmi Srinivasan	
Signature: XV-yaya (1/2)	Date 09/08/2019
(3) Legal Name of Inventor: Swagath Venkataramani	
Signature: V	Date: 09/01/201