Society for Industrial and Applied Mathematics (SIAM)

Consent to Publish

SIAM ("Publisher") requires Authors of articles in SIAM publications to provide a formal written Consent to Publish. The Author must sign the agreement except, in the case of "work-for-hire", when the Author's employer may sign as the party that has the right to grant rights to the Publisher. If there are multiple Authors of the material governed by this document, the term "Author" as used here refers to each and all of them, jointly and severally. ¹

Title of Contribution ("Work"): Mixed-Precision analysis of Householder QR Algorithms

Authors: Lucia Yang, Alyson Fox, and Geoffrey Sanders **Name of Journal:** SIAM Journal on Scientific Computing

Manuscript Number: M129636

1. Author's Warranty

By signing this Consent, the Author warrants all of the following: The Work has not been published before in any form except as a preprint, unless explicitly noted as a footnote to the title. The Work is not being concurrently submitted to and is not under consideration by another publisher. The names listed above as authors appear in the manuscript itself, no author entitled to credit has been omitted, and there are no unnamed authors. The Author has the right to make the grants made to the Publisher complete and unencumbered. The Author also warrants that the Work does not libel anyone, violate anyone's privacy or publicity rights, infringe anyone's copyright, trademark, or trade secrets, or otherwise violate anyone's statutory or common law rights.

2. Author's Rights

- A1. The Author may reproduce and distribute the Work (including derivative works) in connection with the Author's teaching, technical collaborations, conference presentations, lectures, or other scholarly works and professional activities as well as to the extent the fair use provisions of the U.S. Copyright Act permit. If the copyright is granted to the Publisher, then the proper notice of the Publisher's copyright should be provided.
- A2. The Author may post the final draft of the Work, as it exists immediately prior to editing and production by the Publisher, on noncommercial pre-print servers such as arXiv.org.
- A3. The Author may post the final published version of the Work on the Author's personal web site and on the web server of the Author's institution, provided that proper notice of the Publisher's copyright is included and that no separate or additional fees are collected for access to or distribution of the work.

3. Publisher's Rights

Even if the Author does not transfer Copyright to the Publisher, the Author grants the Publisher the following rights in perpetuity.

- P1. The Publisher has unlimited rights throughout the world to publish and distribute the final version of the Work in any form and in all media now known or hereafter discovered.
- P2. The Publisher has unlimited rights throughout the world to translate the final version of the Work and exercise all rights in all media in the resulting translations.

- P3. The Publisher has unlimited rights throughout the world to transfer or sublicense the foregoing rights described in paragraphs (P1) and (P2), in whole or in part, to third parties.
- P4. The Publisher has unlimited rights throughout the world to accept and retain payment for the rights described in paragraphs (P1), (P2), and (P3).
- P5. The Publisher has exclusive first publication rights in the English language, but the exclusivity will expire if the Work is not published within five years of the date this Consent is signed.
- P6. The Publisher has the exclusive right to reproduce, distribute, display, and transmit copies of the final version of the Work, and to authorize others to do so, subject only to paragraph (A3) above.

4. Transfer of Copyright to the Publisher

SIAM strongly recommends this option. This transfer of copyright provides SIAM the legal basis not only to publish and to distribute the work, but also to pursue infringements of copyright (such as plagiarism and other forms of unauthorized use) and to grant permissions for the legitimate uses of the work by third parties. If the work was prepared by a government office or employee as part of his or her official duties, the author should check the box in part 5.

Please choose from one of the options below.

- By selecting the option at left, the Author hereby irrevocably assigns, conveys and transfers the copyright to the Work to the Publisher. The Publisher shall have sole rights of distribution and/or publication of the work in all forms and media, throughout the world, except for those rights given to the Author in Section 2.
- © By selecting the option at left, the Author DOES NOT assign, convey and transfer the copyright to the Work to the Publisher. Please list in whose name copyright should appear here:

Name of Copyright Holder:

Proper Notice of Publication and Copyright

In any authorized reproduction or duplication of the work, in whole or in part, by the Author or an entity as permitted herein, the original publication must be properly credited in the following manner: "First Published in [Publication] in [volume and number, or year], published by the Society for Industrial and Applied Mathematics (SIAM)" and the copyright notice as stated in the article itself (e.g., "Copyright © by SIAM. Unauthorized reproduction of this article is prohibited.") must be placed on all copies.

5. U.S. Government Employees and Contract or Grant Recipients

Please choose from one of the options below if applicable, and indicate in Section 4 above in whose name copyright should appear.

☐ U.S. Government Employees: This Work was prepared by a U.S. government employee or officer within the scope of his/her employment and is not be eligible for U.S. copyright. The government retains a nonexclusive royalty-free right to publish or reproduce the Work, or allow others to do so, for U.S. government purposes. The signature in section 7 represents that all of the Authors are U.S. government employees and that the Work was prepared within the scope of the Author's employment. The signing Author represents that he/she is authorized to execute this Agreement for and on behalf of all the Authors.

☑ U.S. Government Contract or Grant Work: The U.S. government has prohibited copyright from vesting in the Author and has retained a nonexclusive royalty-free right to distribute, publish or reproduce the Work, or allow others to do so, for government purposes. The signature in section 7 represents that the Author believes that the Work was prepared under such a government contract or grant and therefore may be subject to certain government rights.

6. Open Access

SIAM charges a one-time fee of \$2,625 for this option. Once payment is received, the article will be placed into open access. The Publisher will not charge any fees for access to the final published version of the Work, provided the author chooses this option and pays the Article Processing Charge (APC).

☐ By selecting the box at left, the Author chooses the open access option and licenses SIAM to publish the Work under the Creative Commons Attribution 4.0 International (CC BY) License (http://creativecommons.org/licenses/by/4.0/²). The

copyright is still held by SIAM or other entity as specified in Section 4 or 5. The Author agrees to pay the APC of \$2,625.

7. Signatures

This form is to be signed by the Author or, in the case of "work-made-for-hire," by the employer. The signing author represents that he/she is authorized to execute this agreement for and on behalf of all the authors.

Signature: Lucia Mlnah Yang

Date: October 29, 2019

- 1. If Authors make an agreement jointly and severally, they share all rights and responsibilities equally, and if any Author is unable to share in a responsibility, the others become responsible for that Author's share.
- 2. This license allows anyone to share and adapt the Work for any purpose, even commercially.

local_p_id: 131187 time: 1572389107

ip address: 192.168.226.209