This Final Contribution Agreement ("Agreement") regarding the submission and publication of written material ("Articles") is made and entered into as of Sep 23, 2020 ("Effective Date") by and between Ping-Chun Hsieh and the International Conference on Machine Learning (ICML), located at 10010 North Torrey Pines Road, La Jolla, CA 92037.

EventTitle: <u>Exploration Through Reward Biasing: Reward-Biased Maximum Likelihood Estimation for</u> Stochastic Multi-Armed Bandits

Date: Jul 15, 2020

I, Ping-Chun Hsieh, agree that:

- 1 . In exchange for free use of any publicly available copy of Articles I have submitted to ICML, I hereby grant to ICML a non-exclusive, perpetual, royalty-free, fully-paid, fully-assignable license to copy, distribute and publicly display all or part of the Articles, including excerpts and any derivatives thereof, for any purpose relating to the promotion of conferences or events hosted by ICML and the publication, promotion, sale, or distribution of the Articles, in all jurisdictions, throughout all media and technologies that exist currently or may exist in the future.
- 2. I will not authorize the publication of the Articles by any organization other than ICML until at least 60 days after first publication of the Articles by ICML.
- 3. I authorize the use of my name and likeness including, but not limited to my biography and photograph, for the purposes of announcement, promotion and identification in any ICML publications related to the Articles, conferences or this Agreement.
- 4. I guarantee that the Articles are original and do not infringe on the copyright or any other right of any person or entity. Furthermore, I promise to indemnify, defend and hold harmless ICML against any and all third party claims arising from this Agreement or related Articles. Additionally, I release ICML, its successors, assignees and licensees from all claims of infringement of my right of publicity, defamation, false light and any other personal and/or property rights in the Articles.
- 5. I understand I will not receive compensation for ICML use and publication of the Articles and that ICML is not obligated to use my name, likeness or Articles. If ICML does elect to use my name, likeness, or Articles, in whole or part; ICML may edit, check for accuracy, revise, augment, re-title, and adapt all Articles and authorize others to make such changes in the Articles as ICML may deem appropriate.
- 6. If ICML decides not to publish my Articles for any reason, they will give me notice by email and all rights granted under this Agreement shall immediately revert back to me.

- 7. This Agreement is governed by the laws of the State of California, without regard to any conflict of laws rules or principles. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in the County of San Diego, California, as applicable, for any matter arising out of or relating to this Agreement.
- 8. This document contains the entire and complete agreement concerning the use of the Articles by ICML. ICML's failure to enforce any right or provision of this Agreement will not be considered a waiver of those rights. If any provision of this Agreement is held to be invalid or unenforceable by a court, the remaining provisions of this Agreement will remain in effect.

S	pea	ıke	r:
~	$\nu \iota$	117/	<i>-</i> 1 •

Name (Print): Ping-Chun Hsieh

By Checking this box and typing my name in the box below, I am agreeing to electronically sign this contract:

• Accept • Decline

Signature: Ping-Chun Hsieh

Date: Sep 23, 2020

Name (Print): David Blei

International Conference on Machine Learning

Date: Sep 23, 2020

Signature:

This Final Contribution Agreement ("Agreement") regarding the submission and publication of written material ("Articles") is made and entered into as of Sep 23, 2020 ("Effective Date") by and between Yu Heng Hung and the International Conference on Machine Learning (ICML), located at 10010 North Torrey Pines Road, La Jolla, CA 92037.

EventTitle: <u>Exploration Through Reward Biasing</u>: <u>Reward-Biased Maximum Likelihood Estimation for Stochastic Multi-Armed Bandits</u>

Date: Jul 15, 2020

I, Yu Heng Hung, agree that:

- 1 . In exchange for free use of any publicly available copy of Articles I have submitted to ICML, I hereby grant to ICML a non-exclusive, perpetual, royalty-free, fully-paid, fully-assignable license to copy, distribute and publicly display all or part of the Articles, including excerpts and any derivatives thereof, for any purpose relating to the promotion of conferences or events hosted by ICML and the publication, promotion, sale, or distribution of the Articles, in all jurisdictions, throughout all media and technologies that exist currently or may exist in the future.
- 2. I will not authorize the publication of the Articles by any organization other than ICML until at least 60 days after first publication of the Articles by ICML.
- 3. I authorize the use of my name and likeness including, but not limited to my biography and photograph, for the purposes of announcement, promotion and identification in any ICML publications related to the Articles, conferences or this Agreement.
- 4. I guarantee that the Articles are original and do not infringe on the copyright or any other right of any person or entity. Furthermore, I promise to indemnify, defend and hold harmless ICML against any and all third party claims arising from this Agreement or related Articles. Additionally, I release ICML, its successors, assignees and licensees from all claims of infringement of my right of publicity, defamation, false light and any other personal and/or property rights in the Articles.
- 5. I understand I will not receive compensation for ICML use and publication of the Articles and that ICML is not obligated to use my name, likeness or Articles. If ICML does elect to use my name, likeness, or Articles, in whole or part; ICML may edit, check for accuracy, revise, augment, re-title, and adapt all Articles and authorize others to make such changes in the Articles as ICML may deem appropriate.
- 6. If ICML decides not to publish my Articles for any reason, they will give me notice by email and all rights granted under this Agreement shall immediately revert back to me.

- 7. This Agreement is governed by the laws of the State of California, without regard to any conflict of laws rules or principles. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in the County of San Diego, California, as applicable, for any matter arising out of or relating to this Agreement.
- 8. This document contains the entire and complete agreement concerning the use of the Articles by ICML. ICML's failure to enforce any right or provision of this Agreement will not be considered a waiver of those rights. If any provision of this Agreement is held to be invalid or unenforceable by a court, the remaining provisions of this Agreement will remain in effect.

S	pea	ıke	r:
~	$\nu \iota$	117/	<i>-</i> 1 •

Name (Print): Yu Heng Hung

By Checking this box and typing my name in the box below, I am agreeing to electronically sign this contract:

• Accept • Decline

Signature: Yu Heng Hung

Date: Sep 23, 2020

Name (Print): David Blei

Signature:

International Conference on Machine Learning

Date: Sep 23, 2020

This Final Contribution Agreement ("Agreement") regarding the submission and publication of written material ("Articles") is made and entered into as of Sep 23, 2020 ("Effective Date") by and between Anirban Bhattacharya and the International Conference on Machine Learning (ICML), located at 10010 North Torrey Pines Road, La Jolla, CA 92037.

EventTitle: <u>Exploration Through Reward Biasing</u>: <u>Reward-Biased Maximum Likelihood Estimation for Stochastic Multi-Armed Bandits</u>

Date: Jul 15, 2020

I, Anirban Bhattacharya, agree that:

- 1 . In exchange for free use of any publicly available copy of Articles I have submitted to ICML, I hereby grant to ICML a non-exclusive, perpetual, royalty-free, fully-paid, fully-assignable license to copy, distribute and publicly display all or part of the Articles, including excerpts and any derivatives thereof, for any purpose relating to the promotion of conferences or events hosted by ICML and the publication, promotion, sale, or distribution of the Articles, in all jurisdictions, throughout all media and technologies that exist currently or may exist in the future.
- 2. I will not authorize the publication of the Articles by any organization other than ICML until at least 60 days after first publication of the Articles by ICML.
- 3. I authorize the use of my name and likeness including, but not limited to my biography and photograph, for the purposes of announcement, promotion and identification in any ICML publications related to the Articles, conferences or this Agreement.
- 4. I guarantee that the Articles are original and do not infringe on the copyright or any other right of any person or entity. Furthermore, I promise to indemnify, defend and hold harmless ICML against any and all third party claims arising from this Agreement or related Articles. Additionally, I release ICML, its successors, assignees and licensees from all claims of infringement of my right of publicity, defamation, false light and any other personal and/or property rights in the Articles.
- 5. I understand I will not receive compensation for ICML use and publication of the Articles and that ICML is not obligated to use my name, likeness or Articles. If ICML does elect to use my name, likeness, or Articles, in whole or part; ICML may edit, check for accuracy, revise, augment, re-title, and adapt all Articles and authorize others to make such changes in the Articles as ICML may deem appropriate.
- 6. If ICML decides not to publish my Articles for any reason, they will give me notice by email and all rights granted under this Agreement shall immediately revert back to me.

- 7. This Agreement is governed by the laws of the State of California, without regard to any conflict of laws rules or principles. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in the County of San Diego, California, as applicable, for any matter arising out of or relating to this Agreement.
- 8. This document contains the entire and complete agreement concerning the use of the Articles by ICML. ICML's failure to enforce any right or provision of this Agreement will not be considered a waiver of those rights. If any provision of this Agreement is held to be invalid or unenforceable by a court, the remaining provisions of this Agreement will remain in effect.

Speaker:

Name (Print): Anirban Bhattacharya

By Checking this box and typing my name in the box below, I am agreeing to electronically sign this contract:

• Accept • Decline

Signature: Anirban Bhattacharya

Date: Sep 23, 2020

Name (Print): David Blei

Signature:

International Conference on Machine Learning

Date: Sep 23, 2020

This Final Contribution Agreement ("Agreement") regarding the submission and publication of written material ("Articles") is made and entered into as of Sep 23, 2020 ("Effective Date") by and between P. Kumar and the International Conference on Machine Learning (ICML), located at 10010 North Torrey Pines Road, La Jolla, CA 92037.

EventTitle: <u>Exploration Through Reward Biasing</u>: <u>Reward-Biased Maximum Likelihood Estimation for Stochastic Multi-Armed Bandits</u>

Date: Jul 15, 2020

I, P. Kumar, agree that:

- 1 . In exchange for free use of any publicly available copy of Articles I have submitted to ICML, I hereby grant to ICML a non-exclusive, perpetual, royalty-free, fully-paid, fully-assignable license to copy, distribute and publicly display all or part of the Articles, including excerpts and any derivatives thereof, for any purpose relating to the promotion of conferences or events hosted by ICML and the publication, promotion, sale, or distribution of the Articles, in all jurisdictions, throughout all media and technologies that exist currently or may exist in the future.
- 2. I will not authorize the publication of the Articles by any organization other than ICML until at least 60 days after first publication of the Articles by ICML.
- 3. I authorize the use of my name and likeness including, but not limited to my biography and photograph, for the purposes of announcement, promotion and identification in any ICML publications related to the Articles, conferences or this Agreement.
- 4. I guarantee that the Articles are original and do not infringe on the copyright or any other right of any person or entity. Furthermore, I promise to indemnify, defend and hold harmless ICML against any and all third party claims arising from this Agreement or related Articles. Additionally, I release ICML, its successors, assignees and licensees from all claims of infringement of my right of publicity, defamation, false light and any other personal and/or property rights in the Articles.
- 5. I understand I will not receive compensation for ICML use and publication of the Articles and that ICML is not obligated to use my name, likeness or Articles. If ICML does elect to use my name, likeness, or Articles, in whole or part; ICML may edit, check for accuracy, revise, augment, re-title, and adapt all Articles and authorize others to make such changes in the Articles as ICML may deem appropriate.
- 6. If ICML decides not to publish my Articles for any reason, they will give me notice by email and all rights granted under this Agreement shall immediately revert back to me.

- 7. This Agreement is governed by the laws of the State of California, without regard to any conflict of laws rules or principles. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in the County of San Diego, California, as applicable, for any matter arising out of or relating to this Agreement.
- 8. This document contains the entire and complete agreement concerning the use of the Articles by ICML. ICML's failure to enforce any right or provision of this Agreement will not be considered a waiver of those rights. If any provision of this Agreement is held to be invalid or unenforceable by a court, the remaining provisions of this Agreement will remain in effect.

Speaker:

Name (Print): P. Kumar

By Checking this box and typing my name in the box below, I am agreeing to electronically sign this contract:

Signature: P. R. Kumar

Date: Sep 23, 2020

Name (Print): David Blei

International Conference on Machine Learning

Date: Sep 23, 2020

Signature:

This Final Contribution Agreement ("Agreement") regarding the submission and publication of written material ("Articles") is made and entered into as of Sep 23, 2020 ("Effective Date") by and between Xi Liu and the International Conference on Machine Learning (ICML), located at 10010 North Torrey Pines Road , La Jolla, CA 92037.

EventTitle: <u>Exploration Through Reward Biasing</u>: <u>Reward-Biased Maximum Likelihood Estimation for Stochastic Multi-Armed Bandits</u>

Date: Jul 15, 2020

I, Xi Liu, agree that:

- 1 . In exchange for free use of any publicly available copy of Articles I have submitted to ICML, I hereby grant to ICML a non-exclusive, perpetual, royalty-free, fully-paid, fully-assignable license to copy, distribute and publicly display all or part of the Articles, including excerpts and any derivatives thereof, for any purpose relating to the promotion of conferences or events hosted by ICML and the publication, promotion, sale, or distribution of the Articles, in all jurisdictions, throughout all media and technologies that exist currently or may exist in the future.
- 2. I will not authorize the publication of the Articles by any organization other than ICML until at least 60 days after first publication of the Articles by ICML.
- 3. I authorize the use of my name and likeness including, but not limited to my biography and photograph, for the purposes of announcement, promotion and identification in any ICML publications related to the Articles, conferences or this Agreement.
- 4. I guarantee that the Articles are original and do not infringe on the copyright or any other right of any person or entity. Furthermore, I promise to indemnify, defend and hold harmless ICML against any and all third party claims arising from this Agreement or related Articles. Additionally, I release ICML, its successors, assignees and licensees from all claims of infringement of my right of publicity, defamation, false light and any other personal and/or property rights in the Articles.
- 5. I understand I will not receive compensation for ICML use and publication of the Articles and that ICML is not obligated to use my name, likeness or Articles. If ICML does elect to use my name, likeness, or Articles, in whole or part; ICML may edit, check for accuracy, revise, augment, re-title, and adapt all Articles and authorize others to make such changes in the Articles as ICML may deem appropriate.
- 6. If ICML decides not to publish my Articles for any reason, they will give me notice by email and all rights granted under this Agreement shall immediately revert back to me.

- 7. This Agreement is governed by the laws of the State of California, without regard to any conflict of laws rules or principles. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in the County of San Diego, California, as applicable, for any matter arising out of or relating to this Agreement.
- 8. This document contains the entire and complete agreement concerning the use of the Articles by ICML. ICML's failure to enforce any right or provision of this Agreement will not be considered a waiver of those rights. If any provision of this Agreement is held to be invalid or unenforceable by a court, the remaining provisions of this Agreement will remain in effect.

Speaker:
Name (Print): Xi Liu
By Checking this box and typing my name in the box below, I am agreeing to electronically sign this contract:
• Accept • Decline Signature: Xi Liu
Date: Sep 23, 2020

Name (Print): David Blei

Signature:

International Conference on Machine Learning

Date: Sep 23, 2020