Statement of Authorship for joint/multi-authored papers for PGR thesis

To appear at the end of each thesis chapter submitted as an article/paper

The statement shall describe the candidate's and co-authors' independent research contributions in the thesis publications. For each publication there should exist a complete statement that is to be filled out and signed by the candidate and supervisor **(only required where there isn't already a statement of contribution within the paper itself).**

Title of Paper	Variational Bayesian Optimal Experimental Design
Publication Status	Published
Publication Details	Adam Foster, Martin Jankowiak, Eli Bingham, Paul Horsfall, Yee Whye Teh, Tom Rainforth, Noah Goodman (2019). Variational Bayesian Optimal Experimental Design. 33rd Conference on Neural Information Processing Systems (NeurIPS 2019), Vancouver, Canada.

Student Confirmation

Student Name:	Adam Foster		
Contribution to the Paper	First author. Led development of the methodology, theory and conducted all the numerical experiments presented in the main paper. Led the writing of the manuscript.		
Signature		Date	25/10/2021

Supervisor Confirmation

By signing the Statement of Authorship, you are certifying that the candidate made a substantial contribution to the publication, and that the description described above is accurate.

Supervisor name and title: Dr Tom Rainforth		
Supervisor comments I verify Adam's above account		
Signature 	Date	26/10/21

This completed form should be included in the thesis, at the end of the relevant chapter.

Statement of Authorship for joint/multi-authored papers for PGR thesis

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The statement shall describe the candidate's and co-authors' independent research contributions in the thesis publications. For each publication there should exist a complete statement that is to be filled out and signed by the candidate and supervisor **(only required where there isn't already a statement of contribution within the paper itself).**

Title of Paper	A Unified Stochastic Gradient Approach to Designing Bayesian-Optimal Experiments
Publication Status	Published
Publication Details	Adam Foster, Martin Jankowiak, Matthew O'Meara, Yee Whye Teh, Tom Rainforth (2020). A Unified Stochastic Gradient Approach to Designing Bayesian-Optimal Experiments. 23rd International Conference on Artificial Intelligence and Statistics (AISTATS) 2020, Palermo, Italy. PMLR: Volume 108.

Student Confirmation

Student Name:	Adam Foster		
Contribution to the Paper	First author. Led development of the methodology, theory and conducted all the numerical experiments presented in the main paper with the exception of Sec 4.4. Led the writing of the manuscript.		
Signature		Date	25/10/2021

Supervisor Confirmation

By signing the Statement of Authorship, you are certifying that the candidate made a substantial contribution to the publication, and that the description described above is accurate.

Supervisor name and title: Dr Tom Rainforth		
Supervisor comments I verify Adam's above account		
Signature 	Date	26/10/21

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Title of Paper	Unbiased MLMC stochastic gradient-based optimization of Bayesian experimental designs
Publication Status	Accepted for publication
Publication Details	Takashi Goda, Tomohiko Hironaka, Wataru Kitade, Adam Foster (2021). Unbiased MLMC stochastic gradient-based optimization of Bayesian experimental designs. SIAM Journal on Scientific Computing (to appear).

Student Confirmation

Student Name:	Adam Foster		
Contribution to the Paper	Fourth author. Contributed to the development of the paper, including the use of reparametrization. Editing of the entire manuscript, including proofs.		
Signature		Date	25/10/2021

Supervisor Confirmation

By signing the Statement of Authorship, you are certifying that the candidate made a substantial contribution to the publication, and that the description described above is accurate.

Supervisor name and title: Dr Tom Rainforth		
Supervisor comments I have verified Adam's above account with the lead author of the paper.		
Signature 	Date	26/10/21

This completed form should be included in the thesis, at the end of the relevant chapter.

Statement of Authorship for joint/multi-authored papers for PGR thesis

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Title of Paper	Deep Adaptive Design: Amortizing Sequential Bayesian Experimental Design
Publication Status	Published
Publication Details	Adam Foster, Desi R Ivanova, Ilyas Malik, Tom Rainforth (2021). Deep Adaptive Design: Amortizing Sequential Bayesian Experimental Design. Proceedings of the 38th International Conference on Machine Learning, PMLR 139.

Student Confirmation

Student Name:	Adam Foster		
Contribution to the Paper	Co-first author. Led development of the methodology, theory, and writing of the paper. Performed experiments in Sec 6.2 and 6.3.		
Signature		Date	25/10/2021

Supervisor Confirmation

By signing the Statement of Authorship, you are certifying that the candidate made a substantial contribution to the publication, and that the description described above is accurate.

Supervisor name and title: Dr Tom Rainforth			
Supervisor comments I verify Adam's above account			
Signature		Date	26/10/21

This completed form should be included in the thesis, at the end of the relevant chapter.

Statement of Authorship for joint/multi-authored papers for PGR thesis

To appear at the end of each thesis chapter submitted as an article/paper

The statement shall describe the candidate's and co-authors' independent research contributions in the thesis publications. For each publication there should exist a complete statement that is to be filled out and signed by the candidate and supervisor **(only required where there isn't already a statement of contribution within the paper itself).**

Title of Paper	Implicit Deep Adaptive Design: Policy-Based Experimental Design without Likelihoods
Publication Status	Accepted for Publication
Publication Details	Desi R. Ivanova, Adam Foster Steven Kleinegesse, Michael U. Gutmann, Tom Rainforth (2021). Implicit Deep Adaptive Design: Policy-Based Experimental Design without Likelihoods. 35th Conference on Neural Information Processing Systems (NeurIPS 2021) (to appear).

Student Confirmation

Student Name:	Adam Foster		
Contribution to the Paper	Second author. Contributed to the development of the methods and theory of the paper. Contributed significantly to the writing of the paper.		
Signature		Date	25/10/2021

Supervisor Confirmation

By signing the Statement of Authorship, you are certifying that the candidate made a substantial contribution to the publication, and that the description described above is accurate.

Supervisor name and title: Dr Tom Rainforth		
Supervisor comments I verify Adam's above account		
Signature 	Date	26/10/21

This completed form should be included in the thesis, at the end of the relevant chapter.