# **AUTHORSHIP STATEMENT**

## 1. Details of publication and executive author

Title of Publication		Publication details	
PINN-BO: A Black-Box Optimization Algorithm Using Physics-Informed Neural Networks		Published in the proceedings of ECML-PKDD conference 2024	
Name of executive author	School/Institute/Division if based at Deakin; Organisation and address if non-Deakin	Email or phone	
Dat Phan Trong	Applied Artificial Intelligence Institute	trongp@deakin.edu.au	

# 2. Inclusion of publication in a thesis

Is it intended to include this publication in a higher degree	Yes	If Yes, please complete Section 3
by research (HDR) thesis?		If No, go straight to Section 4.

## 3. HDR thesis author's declaration

	1			
Name of HDR thesis author if	School/Institute/Division	on if based at	Thesis title	
different from above. (If the same,	Deakin			
write "as above")				
As above	Applied Artificial Intell	igence	Black-box Optimization using Deep	
	Institute		Neural Networks	
If there are multiple authors, give a f	ull description of HDR th	esis author's c	contribution to the publication (for	
example, how much did you contribu	ute to the conception of	the project, th	e design of methodology or	
experimental protocol, data collection	experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important			
intellectual content, etc.)	intellectual content, etc.)			
The project was conceived from disc	The project was conceived from discussion between all authors. I developed the algorithm, proofs, and code with			
the assistance of my supervisors, Prof. Sunil Gupta and Dr. Hung-The Tran. I ran the experiments and wrote the				
paper, which was proofread and edited by all authors				
I declare that the above is an acci	•	Signature		
my contribution to this paper, and the contributions of		and date	lengdal	
other authors are as described be				
differ dutifiors are as described be	iov.		27/01/2025	

# 4. Description of all author contributions

Name and affiliation of author	Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)
Dat Phan Trong	Contributed to conception, algorithms, design of methodology, code, mathematical proofs, design and implementation of experiments, drafting the manuscript, and proofreading.
Hung The Tran	Assisted with design of methodology and proofreading.
Alistair Shilton	Assisted with mathematical proofs and proofreading.
Sunil Gupta	Assisted with conception, design of methodology, mathematical proofs, and proofreading.

#### 5. Author Declarations

I agree to be named as one of the authors of this work, and confirm:

- that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,
- ii. that there are no other authors according to these criteria,
- iii. that the description in Section 4 of my contribution(s) to this publication is accurate,
- iv. that the data on which these findings are based are stored as set out in Section 7 below.

If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further

v. consent to the incorporation of the publication into the candidate's HDR thesis submitted to Deakin University and, if the higher degree is awarded, the subsequent publication of the thesis by the university (subject to relevant Copyright provisions).

Name of author	Signature*	Date
Dat Phan Trong	engdal	27/01/2025
Hung The Tran	Tly	27/01/2025
Alistair Shilton	Aliston Shelon	27/01/2025
Sunil Gupta	Suid kum Guph	27/01/2025

### 6. Other contributor declarations

I agree to be named as a non-author contributor to this work.

Name and affiliation of contributor	Contribution	Signature* and date
N/A		

<sup>\*</sup> If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author

### 7. Data storage

The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

Data format	Storage Location	Date lodged	Name of custodian if other than the executive author
N/A			

This form must be retained by the executive author, within the school or institute in which they are based.

If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.