

CONFIDENTIAL

INVENTION/TECHNOLOGY DISCLOSURE FORM

Pursuant to the University's Intellectual Property Policy, you are required to inform in writing if you have developed any Intellectual Property (IP), which may have commercial potential or pursuant to any agreement with an external party.

Please complete this Invention/Technology Disclosure Form and submit it to **Nanyang Technological University** (NTU) Innovation and Entrepreneurship (I&E) Office via email at <u>TD Submission@e.ntu.edu.sq</u>, together with a detailed write-up of the invention/technology and other supporting documents, where applicable. Please complete **ALL** fields in the Form, as an incomplete Form may cause a delay in the review process.

Should there be more than one inventor, this Form is to be submitted through the first-named inventor. Do note that correspondence relating to this Form will be directed to this first-named inventor.

The first-named inventor is also responsible to ensure that all co-inventors are included in the Form. Do note that patents may be invalidated if all true inventors have not been named.

CAUTIONARY NOTES:

Date of submission:

Submission of this Invention/Technology Disclosure Form is an official notification to NTU I&E Office that an intellectual property (IP) has been conceived/developed; <u>it does not automatically mean that a patent for an invention/technology will be filed at a Patent Office</u>. NTU I&E Office will review and evaluate the patentability and commercial potential of the invention/technology to support the decision of whether or not patent protection should be sought.

<u>Prior to filing of a patent</u>, any form of enabling disclosure (including verbal, presentation at a conference, poster presentation, or paper publication – including online publication, etc.) of the invention/technology to any third party or the public will jeopardise its patentability and affect the decision for patent-filing.

An inventor is a person who made an intellectual contribution to the conception or development of the invention/technology. A person who reduces these ideas to practice working under the direction of others is not necessarily an inventor, although the person may be a co-author of publications which subsequently describe the invention. Failure to name true inventor(s) in a patent may subject the patent to invalidation by the Patent Office. If there is doubt as to whether an individual should be named as an inventor, please approach NTU I&E Office for assistance.

To : Nanyang Technological University, Innovation and Entrepreneurship Office From : (Name and School of First-Named Inventor) Subject : (Title of Invention/Technology) On behalf of all the inventors, I (the first-named inventor) wish to submit the following invention/technology disclosure for the purpose of (please tick the appropriate box): Patent Filing Consideration Know-how or Confidential Information Documentation Only Copyright Documentation (Software Only) Others: (Please indicate - e.g. trade secret, design etc.)

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1. Project Grants and Sponsors

Please carefully consider ALL project grants and/or sources of funds used in the research that led to this invention and provide the details below (including University grants), as the University may have certain obligations to the sponsors.

Note: Please provide the name of the grant(s) accurately. When in doubt, please refer to the name of the grant(s) provided in the letter of grant award and/or any related agreement.

Please provide a copy of:

- a) any Letter of Grant Award and the Grant terms and conditions;
- b) any related MOU/Research Collaboration/Project Agreement.

| Grant(s) / Collaborator(s) (E.g. NTU Startup Grant, MOE Tier 1, Tier 2 or Tier 3, NRF Fellowship, NRF CRP, NRF CREATE Program, NTU Corporate Lab – please specify which Program or Corporate Lab, Research Collaborator(s), Etc.) | Grant Number(s) | Duration of Grant(s) | Amount(s) Awarded | Principal Investigator(s) |
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Please insert additional rows, when necessary.

| 2. | Use | e of Materials O | btained from Extern | al Sources |
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| | (a) | • • | | le possible by use of proprietary materials from external nizations)? Please tick the relevant box: |
| | | □ Yes | □ No | |
| | (b) | | | ch a copy of any relevant Material Transfer Agreement or terials were received. |
| | (c) | • | ion (e.g. open sour | r trained model using external dataset incorporated in the ce/commercial/third party software, libraries, data set)? |
| | | □ Yes | □ No | |
| | | If yes, please in | dicate: | |
| | | Name of software | are/data set used: | |
| | | Source/data U | RL or data consent | |
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| | | relevant agree | ment): | |

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| De | escri | ption of the lı | nvention | | | | | |
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| (a) | | letailed write-u achment . | ıp of the Inventic | on sho | uld be subm | nitted | together with this Forn | n as a separate |
| | The | e write-up sho | uld contain the f | ollowir | ng informatio | on: | | |
| | (i) | Background relevant prior | | n – a | description | and a | analysis of existing te | chnologies and |
| | (ii) | Novelty of the | e Invention (uniq | que fea | atures not pi | ovide | d by existing technolo | gies, etc.); |
| (iii) Advantages and improvements over existing methods, devices or materials;(iv) Technical description of the Invention; | | | | | | | s; | |
| | | | | | | | | (v) |
| | | ults, together | | | | | , please provide us w ched and the key word | |
| (b) |) Sta | ge of Develop | ment of Invention | on (ple | ase tick app | ropria | ate box) | |
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| | \ If th | ne inventors a | re interested in s | | g a compan | / base | ed on this invention, or | |
| (b) | | | one who may be | e, plea | | urther | | if the inventor |
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| any printed or on-line publication)? | | | |
|---|-------|------|---|
| Has there been any oral public disclosure of the invention (e.g. presentation or lecture)? | ☐ Yes | □ No | If Yes:- Date of disclosure: Occasion: |
| If unpublished and undisclosed, has a manuscript describing the invention been submitted for publication? | □ Yes | □ No | If Yes:- Date of submission: Expected date of publication: Publication/Journal/Website: |

Note: If a Student Thesis or Final Year Project (FYP) Report contains information on this invention being considered for possible patenting, please submit a request for embargo <u>or</u> exemption to NTU Library to withhold public access to any submitted thesis. Please refer to https://libguides.ntu.edu.sg/drntu/Embargo for details.

6. Particulars of Inventors and Inventors' Declaration

I/We (The Inventor(s)) consent that my/our particulars will be used for IP administrative purposes (such as, in IP assignment documents, in patent filings etc.). Where necessary, certain information may be transmitted by NTU Innovation and Entrepreneurship Office to research grantors.

By signing below, I/we declare and confirm that all statements made and the information provided are, to the best of my/our knowledge, true and correct, and that I/we have not withheld any material fact, and I/we have not knowingly omitted inclusion of any other inventor(s) besides me/us. I/We have read and understood the University's Intellectual Property Policy and I/we confirm that I/we are in compliance with the guidelines therein.

Notes:

The Inventors' share of commercialisation revenue upon commercialisation of this IP shall be distributed among the Inventors in accordance with the percentage Inventive Contribution, as provided in this TD form. The percentage of Inventive Contribution should reflect each Inventor's contribution to the inventive concept(s) of the invention/technology, as agreed amongst the Inventors. If Inventive Contribution percentage cannot be agreed upon by the Inventors, NTU Innovation and Entrepreneurship Office will assume equal distribution.

If there are more than four Inventors, please insert additional boxes to provide all the Inventors' particulars and signatures.

Please inform NTU Innovation and Entrepreneurship Office of any change to your particulars in due course (especially, contact details), so that NTU Innovation and Entrepreneurship Office may continue to send you key patent-related correspondence and any commercialisation revenue pay-out(s).

| Inventor 1 | | | | | | |
|---|------|------|------|-------------|-------------|--------|
| Title | ☐ Mr | □ Ms | □ Dr | ☐ Asst Prof | ☐Assoc Prof | ☐ Prof |
| Please tick relevant box | | | | | | |
| Family Name/Last Name/Surname (as in NRIC/Passport) | | | | | | |
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| Full Name in Chinese Characters (if applicable) | | | | | |
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| NTU Employee ID No. (from Workday) If unavailable, please provide Passport No. or NTU Student Matriculation No. (as applicable) | | | | | |
| Country of Citizenship | | SG Permanent Resident (Yes/No) | | | |
| University/Company/Organization | | For ex-employee, please tick this box: □ | | | |
| Faculty/Centre/School/Department /Division | | | | | |
| Position in University Please tick relevant box | ☐ Faculty ☐ Research Scientist ☐ Post-doc / Research Fellow ☐ Research Associate ☐ Project Officer ☐ Graduate Student ☐ Undergraduate Student ☐ Others: (Please indicate) | | | | |
| Any other affiliation (e.g. joint appointments at another entity, dual employments, technical advisory roles to other organizations) during conception of invention | If yes, please complete (a), (b) and (c) below: | | | | |
| | performed under a capacity lin ☐ Yes ☐ No | of this work in this TD has been nked to your other affiliation(s): art of the work performed under a r affiliation(s): | | | |
| | Inventive Contribution (%) will employer for non-NTU Invertigation affiliation (s): *Unless specified otherwise, your Invention (%) | (b), please specify how your I be split between NTU (or your ntor) and each of your other ventive Contribution (%) will be split yer for non-NTU Inventor) and each of | | | |
| Residential Address | | | | | |
| NTU Email Address | | | | | |
| Alternative Email Address (to reach you if NTU email is no longer in use) | | | | | |
| Contact No. | | | | | |
| Inventive Contribution (%) | | | | | |
| Date: | Signature: | | | | |

| Inventor 2 | | | | | | | | |
|--|--|-----------------------------------|-------------------------------------|--------------------|------------------------------------|--|--------|----------|
| Inventor 2 Title | □ Mr | □ Ms | □ Dr | □ Δε | st Prof | □Assoc | Drof | □ Prof |
| Please tick relevant box | | □ W3 | | □ ∧3 | 311101 | ⊔ A3300 | 1 101 | |
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| University/Company/Organization | | | | | For exthis bo | -employe x: □ | e, ple | ase tick |
| Faculty/Centre/School/Department /Division | | | | | | | | |
| Position in University Please tick relevant box | ☐ Faculty ☐ Research Scientist ☐ Post-doc / Research Fellow ☐ Research Associate ☐ Graduate Student ☐ Others: (Please indicate) | | | t . | | | | |
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| Any other affiliation (e.g. joint appointments at another entity, dual employments, technical advisory roles to other organizations) during conception of invention | (a) Ple | please c | omplete | | |) below: ı, departr | nent, | address |
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| Inventor 3 | | | | | | | | |
| Title Please tick relevant box | ☐ Mr | □ Ms | □ Dr | □ As | st Prof | □Assoc | Prof | ☐ Prof |
| Family Name/Last Name/Surname (as in NRIC/Passport) | | | | | | | | |
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| appointments at another entity, dual employments, technical | If yes, pl | lease co | omplete | (a) (b | and (c |) below: | | |
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| | Inventive Contribution (%) wi employer for non-NTU Inve affiliation(s): | (b), please specify how your II be split between NTU (or your entor) and each of your other eventive Contribution (%) will be split |
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| Alternative Email Address (to reach you if NTU email is no longer in use) | | |
| Contact No. | | |
| Inventive Contribution (%) | | |
| Date: | Signature: | |
| | | |
| Inventor 4 | | |
| Title | │ □ Mr □ Ms □ Dr □ As | st Prof □Assoc Prof □ Prof |
| Please tick relevant box | | |
| Family Name/Last Name/Surname (as in NRIC/Passport) | | |
| Given Name (as in NRIC/Passport) | | |
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| If unavailable, please provide Passport No. or NTU Student | | |
| Matriculation No. (as applicable) | | |
| Country of Citizenship | | SG Permanent |
| | | Resident (Yes/No) |
| University/Company/Organization | | For ex-employee, please tick this box: □ |
| Faculty/Centre/School/Department /Division | | |
| Position in University | ☐ Faculty ☐ Research Sc | ientist |
| Please tick relevant box | ☐ Post-doc / Research Fellow | |
| | | Project Officer |
| | | Undergraduate Student |
| | ☐ Others: (Please indicate) | <u>.</u> |
| Any other affiliation (e.g. joint | ☐ Yes ☐ No | |
| appointments at another entity, | | |
| dual employments, technical | If yes, please complete (a), (b | o) and (c) below: |

| organizations) during conception of invention | (a) Please indicate the organization, department, address and position: |
|--|---|
| | (b) Please advise if any part of this work in this TD has been performed under a capacity linked to your other affiliation(s): Yes No If yes, please specify the part of the work performed under a capacity linked to your other affiliation(s): |
| | (c) If 'Yes' is indicated for (b), please specify how your Inventive Contribution (%) will be split between NTU (or your employer for non-NTU Inventor) and each of your other affiliation(s): |
| | *Unless specified otherwise, your Inventive Contribution (%) will be split equally between NTU (or your employer for non-NTU Inventor) and each of your other affiliations. |
| Residential Address | |
| NTU Email Address | |
| Alternative Email Address (to reach you if NTU email is no longer in use) | |
| Contact No. | |
| Inventive Contribution (%) | |
| Date: | Signature: |
| | |

7. NTU Inventors' IP Assignment

Note to Non-NTU Inventor(s): If you are not employed or affiliated with NTU, this Assignment does not apply to you, as IP ownership and assignment obligations are governed by your employment contracts and institutional policies with your respective company/organization/university.

ASSIGNMENT

(To be completed and signed by NTU inventors only)

In consideration of my/our employment or affiliation with Nanyang Technological University (NTU), and NTU sharing with me/us a percentage of any net royalties, fees or other benefits NTU receives from commercialization of the Invention in accordance with NTU's Intellectual Property Policy, I/We, the undersigned, hereby assign to Nanyang Technological University my/our full, exclusive benefit and entire rights, title and interest in and to this Invention, as described in this Technology Disclosure.

This assignment encompasses all intellectual property rights worldwide relating to the Invention, including but not limited to patent rights, software copyrights, designs, trade secrets, knowhow and other intellectual property rights. The assignment extends to any future improvements, modifications, enhancements, or derivative works relating to the Invention developed during my/our employment/affiliation with NTU.

I/We further agree to execute any additional documents as requested, to assign to NTU my/our respective rights to this Invention and in any patent application(s) filed for this Invention.

I/We represent and warrant that I/we have the full right and authority to make this assignment and that the Invention has not been previously assigned or encumbered to/by any third party.

NTU Inventors:

| Full Name (Family and Given Name) | Date | Signature |
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