Information

Please click on the information bubbles on the right hand side for help responding to the questions and links to the relevant section of the *National Statement on Ethical Conduct in Human Research 2018.*

Further information:

- Document templates (i.e Peer review proforma, Consent Information Statement) can be found under the 'Help - Templates' tab at the top of the page.
- Please see here for the ERM User Guide and Committee submission deadlines.
- Once the application form has been signed by the Chief Investigator, please ensure you click submit on the left hand side and receive the system generate confirmation of submission email.
- When submitting an updated application after it has already been reviewed by the ethics committee, please attach your **point-by-point response** to the committee's questions in Section K as a separate document.
- For specific questions/assistance please contact the ethics team on resethics@swin.edu.au or + 61 3 9214 3845 or 9214 8145.

Please click next on the left hand side to begin the application.

Project Overview

A1 Project title

Fabrication design strategies - Continuous fibers Research Workshops

Project Duration

A2 When do you anticipate starting your research project? 14/02/2022

A3 What is the anticipated duration of the project, in years? 2

Checklists

A4 Does this project involve recruiting human participants?

- (•) Yes
- ( ) No

A5 Does this project involve the secondary use of data related to human participants?

- (•) Yes
- ( ) No

A4.1 You must select at least one checkbox from the following two questions. The responses you provide will allow the research office to assess whether the application is exempt. low risk or greater than low risk and assign it to a review committee accordingly.

This project aims to specifically recruit from the following participant groups:

Tick all that apply.

- [ ] Aboriginal and Torres Strait Islander participants
- [ ] Women who are pregnant and the human fetus
- [ ] Minors (under the age of 18)
- [ ] People with a cognitive impairment, an intellectual disability, or a mental illness, e.g. anxiety, depression, brain injury, dementia, ADHD, ASD etc.
- [ ] People considered to be a forensic patient, an involuntary patient or a security patient
- [ ] People with impaired capacity for communication
- [ ] Prisoners or people on parole*
- [ ] Military personnel and / or veterans*
- [ ] Victoria Police personnel*
- [ ] People highly dependent on medical care who may be unable to give consent (e.g. unconscious)*
- [ ] Hospital patients or staff*
- [ ] People who may be involved in illegal activities
- [ ] People who are overseas
- [ ] People who will be subject to any physical/psychological/social/economic or legal risks greater than inconvenience or discomfort, in either the short or long term, resulting from participation, or use of data in this project
- [ ] People who will be asked to undergo neuroimaging (e.g. MRI/MEG)
- [ ] Request for a consent waiver for health data
- [x] None of the above

A4.2 **And / Or the project involves any of the following:**

Tick all that apply.

- [ ] Research that has been approved by another NHMRC registered Australian Human Research Ethics Committee (see info)
- [ ] Clinical trial of, or administration of a drug or device, clinical or psychological treatments
- [ ] Use of identifiable/coded health information or biospecimens without consent e.g. medical records, data linkage
- [ ] Sensitive / contentious issues e.g. suicide, sexuality, eating disorders, body image, grief, addiction, trauma, violence, abortion, illicit drug use
- [ ] Radioactive substances / Ionising radiation e.g. DXA, X-ray
- [ ] Intends to study/expose illegal activity
- [ ] Human genetics
- [ ] Derivation of human embryonic stem cells
- [ ] Assisted reproductive technology
- [ ] Deception of participants, concealment or covert observation
- [ ] Seeking disclosure of information which may be prejudicial to participants
- [ ] Medical research (including epidemiological research
- [ ] Use or disclosure of information from a Commonwealth agency
- [ ] Use or disclosure of personal information
- [ ] Collection, use or disclosure of personal information from a private sector organisation
- [x] None of the above

A6 Does the research involve the collection, use or disclosure of *health information*?

- ○ Yes
- ◉ No

WWCC

A7 Do the researchers involved in this work require a Working With Children Check (WWCC)?

If a WWCC is required, you will be asked to provide a WWCC Number and Expiry date later in the form for all personnel associated with the project.

- ○ Yes
- ◉ No

Chief Investigator / Contact

B1 **Chief Investigator**

The CI cannot be a student or non-Swinburne staff member, and there can only be one Chief Investigator for a project.

B1.1 Title	Mr
B1.2 First Name	Mark
B1.3 Surname	Burry
B1.4 Email	mburry@swin.edu.au
B1.5 Telephone	+61 41 737 9177
B1.6 Organisation	Swinburne
B1.7 Faculty	Faculty of Health, Arts & Design
B1.7.2 Department / Research Centre (FHAD)	SOD - Centre for Design Innovation
B1.6.2 Campus	Hawthorn

B1.8 WWCC Reference Number

B1.9 WWCC Expiry Date

B1.10 Describe the research activities this person will be responsible for.

PhD Supervision

B1.11 Describe the person's expertise relevant to the current research activity.

B2 Is this the contact person for this application?

- (•) Yes
- ( ) No

Other Investigators

B3 Do you have?

- [ ] Associate Investigators
- [ ] Student Investigators
- [x] Neither of the above

Conflict of Interests

B5 Do any of the investigators have relevant interests or conflicts of interest that they need to disclose or manage?

- ( ) Yes
- (•) No

Class Project

C1 Is this a class project?

- (•) Yes
- ( ) No

C1.1 Provide a summary of the role students will play in the conduct of the project, the training and supervisory arrangements, and indicate where student investigator involvement will be recorded.

The students will participate in a set of workshops where the student will be given some design protocols framework guided through material and fabrication systems in order to explore and probe test the capabilities of such design systems, without compromising the quality of education he is offering, rather enhancing its potential, allowing students and fellow researchers to engage in real-world research, giving them the opportunity to actively engage with these processes in a safe environment for them.

The main of the student's role is to provide validity for design workflows that give functional design solutions validated through the fabrication technique.
For such a task the students will be trained in a set of workshops of the design methodologies to use for the specific output required at a material and manufacturing level. Only the outcomes of these, therefore, mentioned probes are the subject of study.
The student's role is to test the presented design framework given to them in order to test the validity of the implementation and performance of the design process. As part of this role, the student will also be involved with the design process in order to help coach other designer teams and support their efforts through reference data analysis, and suggestions for future iterations of the project. The students will not be asked to develop any of the actual framework, nor any element of the PhD research. They will have the optional possibility to use or not use the framework, and this choice will have no impact in any form on their assessment. Only their work, after submission and graduation, will be studied and analysed by Eduardo Chamorro, with due credits and copyrights in all cases.

External Committee Review

C2 Has this project been submitted for ethics review by any other ethics committees (including a Swinburne Ethics committee or subcommittee)?

- ( ) Yes
- (•) No

Peer Review

C3 Has your project undergone peer review? [Please note that applications that require review by the main committee (SUHREC) are strongly advised to have undergone peer review with corresponding evidence provided. The peer review cannot be undertaken by an investigator on the project team or by an individual/organisation that may have a conflict of interest]. Please also note that peer review is different to review of the ethics application by a Research Ethics Advisor. Please click information bubble for more information.

- (•) Yes
- ( ) No

C3.1 Peer review by:

- [ ] NHMRC/ARC Peer Review Panel
- [ ] Other external funding body peer review
- [x] Student candidature review
- [ ] Other

C3.2 What was the outcome of review? In your response outline the peer review process and provide specific details describing how this impacted the submitted proposal, i.e. what changes were made.

Satisfactory

C3.3 Attach any documentation relating to the peer review (e.g. Confirmation of Candidature report for student projects).

C4 Has this application been reviewed by an Ethics Advisor?

- ○ Yes
- ◉ No

Third Party Involvement

C5 Has or will this project be submitted to any government departments or institutions or businesses, to obtain that organisation's approval?

- ○ Yes
- ◉ No

External Organisations

C6 Are any external organisations involved?

- ○ Yes
- ◉ No

C7 Is this research covered by a research agreement or contract?

- ○ Yes
- ◉ No

Funding

C8 Has funding been sought for this project?

- ○ Yes
- ◉ No

Project Overview and Aims

D1 In plain language, provide a succinct overview of your project.

This research aims to explore how composites 3D printing can assist in the fabrication of high-performance structures at an architectural level, by establishing design workflows informed by materiality.

D2 In clear lay language, provide a detailed description of the background and the potential significance of the research project. (If appropriate, provide a bibliography).

The construction industry is among the least digitised sectors in the world and has had the lowest productivity gains of any industry over the past two decades. One of the key aspects to deal with these challenges, increasing the speed, accuracy and safety whilst reducing cost and waste in the construction industry, is the integration of new and alternative construction methods (CECE, 2019). The utilisation of additive manufacturing in post of automatization in the construction processes reduces the cost of high complexity structure implementation in the industry. This helps expand the geometric complexity, functional integration, and smart assembly logic to develop new methodologies and processes that evolve and reinterpret the use of materials to produce new architectural models.

This change of paradigm in architecture has already proven feasible at the academic and research level where multiple institutions have not only demonstrated the theoretical benefits of digitizing the industry but also built several demonstrators and state of the art pavilions to showcase the potentials of these new technologies.
Nowadays the major constraint for the integration of high-performance materials and additive manufacturing (AM) techniques in construction is the cost of the material supplied, which is typically US $100 per kilogram, outweighing the cost of the machine itself. Therefore to allow these materials to be integrated into the construction industry they must come in at US $100 per tonne (Soar, R. and Andreen 2012). Several new material and fabrication technique investigations remain at exhibition scale as they cannot outperform already existing ones in relation to the combination of cost, on-site execution and construction.
Inherent to the actual FRP manufacturing process is the need for a permanent or temporal body frame to allow the deposition of these materials meanwhile the assembly proceeds.
As well, layer-by-layer AM is either constrained by that same need or limited geometrically by the inherent overhang capabilities of the material in deposition.

There is a niche for exploration of the architectural possibilities of different AM techniques other than the layer-by-layer deposition as CFM, AFP, FRP that research in the material usage on material/load capabilities advanced fabrication techniques. The research proposes an update of the previously done research of material-fabrication informed composites structures, structurally informed geometry systems and its application for architectural construction techniques with the existing state of the art additive manufacturing techniques on composite continuous manufacturing.

D3 Clearly state the aims and/or hypotheses of the research project.

Additive fabrication strategies utilizing fabrication-material-design integration can result in optimized architecture structural models that can handle the complexity and cost savings of composites high-performance materials.
A Malerial Structurally Optimized Architecture (MSOA) is a term coined by the author to describe a comprehensive design framework informed equally by the material, the fabrication methods and geometrical capabilities of the previous, which is structurally optimized for an architectural application. The research addresses this outlook by exploring the possibility of a spatial extrusion for complex space mesh high-performance structures.

This design workflow can be used as a 3d printing technique for producing structures with high supported load per self-weight ratio, so-called in this research high-performance spatial 3D printing. Covering, thus, a whole additive manufacturing workflow adapted to architectural elements, that attempts from a technological point of view to rethink the construction sector.
The research addresses this outlook by exploring the possibility of a spatial extrusion for complex space mesh high-performance structures. The diverse, partly overlapping aims can be classified into the following:

- Materiality research on fast curing deployable 3d printing composites
- Develop a range of fabrication strategies suitable to obtain continuous fibre high-end digitalization of composite parts by spatial structural frame algorithms
- Definition of geometrical design and structural performance parameters that comprehended construction industry graded functional elements
- To explore and categorise the fabrication technology for the absence of moulds
- Possibility to create tailor-made objects from micro to macro-level geometrical point of view and states in between
- Implementation of these fabrication strategies from a direct structural application to possible use as performative formwork for jammed architectural structures or leaking formwork.
- Ultra-lightweight thin section encapsulating lost formwork.
- Outperform traditional load-bearing construction elements reaching the target of construction market applications.
- The reduction or elimination of the fabrication limits thanks to the absence of the typical mould constrictions, undercuts, etc.

D4 Clarify how will you go about your project (i.e., provide a clear explanation of all procedures and methods to be employed).

This research follows learning by doing methodology (experimental research methodology). The development of such a framework is established by carefully comparing both theoretical and practice-based research in three main research areas, materials, manufacturing methods and design protocols. Drawing attention to the critical analysis of possible technique implementation not only from a feasibility point of view but also adequacy to the construction sector.
As to what technologies, materials and processes may be implemented as a consequence of such analysis, it will be systematically tested and implemented per several probes, as workshops, small scale demonstrators production and by per to per reviews.

D5 Outline the risks and benefits of your research (for example, legal/social/financial/reputational risks and benefits).

You will be asked to provide more details related to participant risks and benefits in section E if applicable.

Exposing, through research by the design process, the thesis is leading as the following benefits:
- An operational framework of advanced fabrication techniques involving design for manufacturing processes. Based on the utilization of robotic arms for construction as a combined tool for offsite-onsite manufacturing.
- Optimized/democratized framework applicability of high-end fabrication and materials in the construction industry.
- A catalogue of possible outputs as well an interpretation of current and in development AM techniques that could be applied among the construction industry.
- Computational design protocols of geometrical implementation form-finding, based on the structural behaviour of geometric spatial lattice output models

The thesis development needs to account for these risks:
-The development of several ad hoc open-source extruders for continuous fibre 3d printing that allows multiple AM processes cannot collide with the actual patents of fabrication methods and extruders already existing in the market under a pending patent process.

D6 Outline the arrangements planned to minimise the risks involved in this research.

Contact the companies and principal actors leading the research in the field of continuous fibre composite and research on ongoing patents actually published at the time of the research. In case there is a patent collision on the tool developed until the date, either modify the fabrication process or look for an academic patent clearance agreement with the patent owner, avoiding any disclosing of their patented process or technique.

Inclusion/Exclusion Criteria

List the relevant groups of participants, and describe and justify any inclusion and exclusion criteria for each group and explain how this group will be invited to participate. Please complete Section E for each participant group, i.e. do not combine all groups into one section.

E1 Participant group: Students of the Master in Robotics and Advanced Construction and Master in Advanced Architecture

E2 Recruited from: Institute for Advanced architecture of Catalonia

E3 Number of participants: 10-30

E4 Do you have any criteria for inclusion or exclusion of this participant group?

- ○ Yes
- ◉ No

E5 For this group, explain who will invite potential participants to be involved in this project, and how will they be invited?

Students will be introduced to the research and the framework during their class. they will have then the opportunity to use the conceptual and technological framework or decide to not use it, without impacts on their grade or the resulting project. Students projects
will be analysed and integrated into the research with due credits and copyright authorization

List the relevant groups of participants, and describe and justify any inclusion and exclusion criteria for each group and explain how this group will be invited to participate. Please complete Section E for each participant group, i.e. do not combine all groups into one section.

E1 Participant group: Industry Partners & Practitioner.

E2 Recruited from: IAAC, RobArch, Fabricate and other conference networks

E3 Number of participants: 5-20

E4 Do you have any criteria for inclusion or exclusion of this participant group?

- ○ Yes
- ◉ No

E5 For this group, explain who will invite potential participants to be involved in this project, and how will they be invited?

The participant will be introduced to the research topic via email or phone exchange, before accepting or not being interviewed for this
research. They will be given the possibility to check the transcript of the interview and accept or not publish it.

Participant Recruitment

E6 Indicate which method(s) you will use to recruit participants for this research?

Tick all that apply.

- ☐ Advertisement (including social media)
- ☑ Email
- ☐ Mail out
- ☑ Personal contacts
- ☐ Snowballing
- ☐ Telephone
- ☐ Participants from previous study
- ☐ Participants approached in person
- ☐ Participants will be observed without their knowledge and will not be actively recruited
- ☑ Other

E6.2 If Other, clarify how and where you will recruit participants.

Participants are enrolled in the Master in Robotics Advanced Construction and Master in Advanced Architecture in IAAC. It is an activity that is elective as part of their learning curriculum, and therefore all students following the program will participate and be awarded credits for their participation if chosen to participate in the project. The select form of communication and elective selection is through an individual google form, whether the students are interested in participating and signup for the elective workshop.

E6.3 Attach a copy of the proposed text of the advertisement/email.

Human Participants

This section has come up as you indicated in Question A4 that you are recruiting human participants.

If this is not the case and your research is only looking at secondary use of an existing data set then please revise your answer to Question A4 and see Question A5.

Participant Involvement

E7 Provide details about what you are asking participants to do or what is to be done to them.

Include a step-by-step description of what participants will experience if they choose to take part in this project.

If the student accepts to be part of this project, he will :
- receive a conceptual and technological framework to work with it
- develop and document his project as any other student.

Participants will ask to develop a small research project based on the subject provided for the workshop that will have a final submission composed of a 10 pages presentation on the work developed, a short video description in case needed, photographic reports in case of hardware development or outcome based on the research proposed and a short written abstract/description on the work developed during the workshop duration.

If the student does not want to be part of this research, it should not influence his experience

E8 How much time are you asking of participants, and where and when will that time be required?

The average duration of this kind of workshopt at the Institute for Advanced Architecture of Catalonia is of 40 hours student involvement.

Qualification Requirement

E9 Does the research involve the administration of any tests or procedures that require particular qualifications (e.g. taking blood samples, biopsies, etc.)?

- ○ Yes
- ◉ No

Indication of Medical Condition

E11 Does the research involve measures or procedures that are diagnostic or indicative of any medical or clinical condition, or any other situation of concern?

- ○ Yes
- ◉ No

Data Collection

E14 Describe specifically what type(s) of data or information will be collected (e.g, demographic information, medical/health data, focus group discussions, interview responses, etc.).

You will be asked about specific data collection methods below.

The following data will be collected after completion of the course by students, extracting them from the normal submission files :
- Quantitative and qualitative data about the technological implementation.
- Quantitative and qualitative data about the design implementation.
- Quantitative and qualitative data about the resulting produced object.

The names and surnames of the student participants will be collected as per referencing the work they have submitted and are associated with further publications and research projects.

E15 Specify (by name(s)) who will collect this research data.

Eduardo Chamorro Martin

E16 This research will include the following data collection methods:

- [ ] Questionnaires / Surveys
- [ ] Interviews
- [ ] Audio recording
- [x] Photography
- [x] Videography
- [ ] Focus groups
- [x] Observations
- [ ] Psychological inventories
- [ ] Collection of biospecimens
- [ ] Administration of a substance
- [ ] Database access
- [ ] Other

Data Collection: Audio Recording/Photography/Videography

E16.10 Provide details about audio recording/ photography/videography, e.g. will participants be aware of this? Has this information been included in the Explanatory Statement?

Yes, all the students have signed the IAAC terms of conditions at the beginning of the academic year including in that document, can be found the copyright, explicit consent for data storage, consent to the publication of images and GPRD Europe data consent clearance.

Data Collection: Observations

E16.13 Provide details about the observations including who will undertake these and where and when. Will participants know about the observations?

The participants will be observing and critically analysing the process. The insights they gain will be discussed in the final presentation of the workshop. The participants will be informed that any valuable insights based on their observations can be included in the research/thesis.

Risks and Benefits to Participants

E17 Outline the benefits to participants and /or to the community as a result of this research being conducted. If no benefits to participants are anticipated, please state this.

The participants will have the opportunity to test ongoing state of the art research and probe actual in-progress research in architectural academia. It is expected that students will benefit to participate in the research by gaining access to a useful and interesting framework for their own projects.
It is expected that industry partners will benefit to participate in the research by extending the discussion and learning more about this topic

E18 Outline any potential risks, in either the short or long term, of participation in this project. e.g. physical, psychological, social, economic or legal risks to participants greater than inconvenience or discomfort.

The risk associated with this workshop development might come from the usage of the fabrication facilities of the laboratory fabrication department. Special care will be given to not impose the research on students and allow them to accept or refuse to participate in the research without impact on their grade, learnt content or didactic experience.

E19 How do the likely benefits of the project justify the burden(s) and/or risk(s) to participants?

From previous experience, students are very keen to gain access to such a creative framework and be able to experiment it freely in their project, without any extra effort required. The fabrication facilities have clearly stated the protocols of the fabrication lab, provided health and safety training courses to the students and identified safe workflows for the development of the processes used in the workshop in order to reduce at a minimum level any possible risk.

E20 Outline the arrangements planned to minimise the risks to participants involved in this research.

The research will be clearly presented to Students and Industry partners with the clear option to opt-out from the research at any point
without influence on other educational/professional relationships. The students have to pass a health and safety course to be permitted to use the facilities.

E21 Are all the risks outlined on the Explanatory Statement and, where relevant, on the Consent Form?

- (•) Yes
- ( ) No

E22 What will you do in cases where serious events or emergencies occur as a result of participation in this project and what facilities are available to deal with such incidents? Please note that the Swinburne Ethics Office must be notified in all instances of adverse events/incidents as soon as possible.

Students and Industry partner can contact the director Areti Markopoulou if any conflict or issue emerge during the research. In case of physical damage or injury occurs, the student or responsible must seek immediate assistance and notify any IaaC staff, that will follow the Spanish regulations of health and safety at education institutions.

Counselling

E23 If required, is a list of appropriate counselling or support services included in the Explanatory Statement?

- ( ) Yes
- ( ) No
- (•) N/A

Risks to Other Parties

E24 Could there be any possible risks to others not directly involved arising from this project? This can include friends/relatives of participants, bystanders, the University or sponsor.

○ Yes ◉ No

Location of Research

E25 Where is the human research component of your project to take place?

- ☐ Online
- ☐ Swinburne (Australia)
- ☐ Swinburne (Sarawak)
- ☑ Overseas
- ☐ Other

E25.2 Outline any local legislation, regulations, permissions or customs that need to be addressed before the research can commence.

N/A

E25.3 Attach any authorising correspondence and/or approval documentation to the application.

Documents

Type	Document Name	File Name	Version Date	Version	Size
External approval - General	2021_Fab lab Protocol for students	2021_Fab lab Protocol for students.pdf	20/01/2022	2021	12.9 MB
External approval - General	IaaC Terms Conditions 2021-22	IaaC Terms Conditions 2021-22.pdf	10/02/2022	21-22	451.8 KB

Researcher Travel

E26 Does this research project involve any of the *researchers* travelling overseas?

○ Yes
◉ No

Participant Consent

E27 Indicate how you will obtain consent:

Tick all that apply.

- [x] Consent waiver
- [ ] Opt out consent
- [ ] Written consent
- [ ] Oral consent
- [ ] Implied consent
- [ ] Other

Withdrawal of Consent

E27.13 Explain whether (and to what extent) participants can withdraw from the project and/or withdraw data already provided (noting that data often cannot be withdrawn once it has been aggregated with other responses and/or been published).

Participants can withdraw from all activities by means of a written appeal. Participants have already accepted that their data may be used in educational activities for research and promotional activities and therefore have already accepted the terms of use by means of a previously signed agreement (IAAC terms & conditions) signed by all students attending any educational program in IAAC

Reimbursement

E34 Will you be offering reimbursements to any of the participants?

- ( ) Yes
- (•) No

Deception or Limited Disclosure

E35 Does the research involve deception or limited disclosure, i.e. some or all of the participants in this research will *not* be fully informed about the true nature of the research?

- ( ) Yes
- (•) No

Illegal Activity

E36 Are you researching any activity or using a method that is or might be considered illegal? Or could your research uncover illegal activity? Includes researching illegal/illicit substance use, offences, violence, abuse, bullying, etc.

- ( ) Yes
- (•) No

Minors

E37 Are any participants under 18 years of age?

- ○ Yes
- ◉ No

Pre-existing Relationship

E38 Is there a pre-existing (unequal) relationship between anyone involved in recruiting and/or collecting data and anyone from any of the participant groups? e.g. teachers/students, health care providers/patients.

- ◉ Yes
- ○ No

E38.1 Describe the nature of the relationship, and explain what special precautions will preserve the rights of such people to decline to participate or to withdraw from participation once the research has begun.

Teachers/students, students will be given the option to not actively participate in the course development, yet complete the course using other framework / software.

Secondary Use of Existing Data

You indicated in question A5 in the Checklist section that you are using data for purposes other than which it was originally collected (secondary use of data). This includes the use of data for research that was collected previously for a non-research purpose. If this is not the case then please go back to that question and revise your selection.

F1 Does this research involve the use of existing identifiable data or specimens previously collected by this or another organisation or government agency (e.g. social media organisation, business or hospital)?

- ○ Yes
- ◉ No

Risks and Benefits

F2 Outline the risks that arise from the sourcing and analysis of this data and how these will be managed?

N/A

F3 Outline the potential benefits of this secondary use of data.

N/A

F4 How will your research/findings account for any limitations arising from your choice of data sets/databases or from missing data?

N/A

Consent for Data Collection/Use

F6 How was participant consent obtained for the ***original*** collection and use of the data or biospecimens?

(note if the original participant consent did not include use of the data or biospecimens for this future research, then no informed consent was obtained and you may need to obtain a waiver of consent as part of this application).

- ☐ Implied consent
- ☐ Written consent
- ☐ No consent was obtained- seeking a waiver of consent
- ☑ Other

F6.2 Explain how consent was obtained.

N/A

Data Storage

G1 What type of data will be received or handled throughout the research?

See Information Bubble for definitions of types of data.

Tick all that apply.

- ☐ Non-identifiable
- ☐ Re-identifiable
- ☑ Individually Identifiable

G2 Describe the security arrangements for the storage of the data during the collection phase.

All the data is stored in the Institute for Advanced Architecture of Catalonia internal servers and only accessible to the researchers associated with the workshop development and subjects of study protected by the IT department firewalls. Data are uploaded by participants via secure web transfer (HTTP SSL) on a web-based server with controlled access.

G3 Describe the security arrangements for the storage of the data during the analysis phase.

All the data is stored in the Institute for Advanced Architecture of Catalonia internal servers and only accessible to the researchers associated with the workshop development and subjects of study protected by the IT department firewalls.

G4 How will any electronic data will be stored?

- ☐ OneDrive for Business
- ☐ Nectar
- ☑ Other

G4.1 If 'Other', describe.

Advanced Architecture of Catalonia internal servers and GDrive

G5 How and where will any physical data be stored?

IAAC, Barcelona, SPAIN

G6 How will the information or data be analysed? Ensure that your description includes how this will answer your research aims/questions.

The participant's outcome will be observed and critically analyse as part of the research process. The insights gained will be discussed in the final thesis and the participants will be informed that any valuable insights based on their observations can be included in the
research/thesis.

Consent

G7 Does the research involve collection, use or disclosure of health, sensitive or personal information without consent from the individual(s) the information relates to?

- ○ Yes
- ◉ No

Contractual/Licensing Agreements

G8 Are the research data or samples subject to any contractual and/or licensing arrangements and confidentiality agreements?

- ○ Yes
- ◉ No

Access and Security

G9 Are the data access and security arrangements detailed in the Explanatory Statement and Consent Form?

- ◉ Yes
- ○ No
- ○ N/A (for secondary use projects)

G10 Will any other persons not listed as a researcher on this application have access to the data during data collection, analysis and storage?

- ◉ Yes
- ○ No

G10.1 Describe who else will access the data, how participants are informed about this and how you will ensure that their privacy is protected during the data transfer process to a third party.

The academic coordinator of the institute, as well as other faculty of the same course, will also have access to the student's submission file,
as any submission file at IAAC.

Publication Format

G11 Indicate the format(s) in which the research will be published and/or communicated to participants or organisations.

- ☑ Thesis
- ☑ Journal article
- ☑ Book / Book chapter
- ☑ Conference
- ☐ Dataset
- ☐ Report to participants
- ☐ Report to funder
- ☐ Report to organisation
- ☐ Report to community or group
- ☑ Other

G11.1 If 'Other', what format will be used?

Exhibition, video.

Access to Results

G12 Describe how participants and organisations will be able to access a summary of the findings of this research project.

- [x] Email/letter to participants
- [ ] Notice board
- [ ] Public blog/website
- [ ] Other

G13 In what format will others be provided with the results?

- [x] In totally de-identified summary form, in which no individual can be identified
- [ ] In de-identified summary form, but in a manner which may allow some individuals to be identified
- [x] In identified form, or in a manner which may allow some participants to be identified
- [ ] Other

Retention Time

G14 What is the minimum time that the records and materials will be retained by the University?

- [ ] Enough time for Internal student assessment and requirements only (e.g., undergraduate or coursework projects)
- [ ] 5 years after any publication or published outcome
- [ ] 7 years after last health-related interaction with participant(s) or last health service provision
- [ ] 15 years after last interaction with participant(s) (e.g., for clinical trials)
- [ ] Until participant(s) who were minors at the time of research participation attain 25 years of age (e.g., identifiable health-related information involving minors)
- [x] Indefinite period or archived permanently
- [ ] Other

G14.1 Where will the data be archived?

If this is on a third-party repository or databank, provide details.

Institute for Advanced Architecture of Catalonia internal servers database and GDrive

Re-use by Future Projects

G15 Do you plan to use the data (or samples) for future research projects by the same research team, beyond the standard 5 or 7 year storage period?

- ○ Yes
- ◉ No

G16 Do you intend for the data (or samples) to be used for future research projects by other researchers?

- ◉ Yes
- ○ No

G16.1 Outline what data (or samples) may be used for future research by other researchers, and the potential future uses.

Process evaluation for further development consisting of:
- Comparative analysis results
- Response time of algorithms
- Interview transcripts

G18 Is the information in G14, 14.1, 15, 15.1, 16 in the written information statement?

- ◉ Yes
- ○ No
- ○ N/A (for secondary use projects)

Consent Waiver - National Statement

In accordance with Section 2.3.10 of the National Statement, clearly and succinctly address each of the questions below:

J1 Explain how involvement in the research carries no more than low risk (see paragraphs 2.1.6 and 2.1.7, page 15) to participants.

The following is negligible risk research, there is no foreseeable risk or harm or discomfort

J2 Explain how the benefits from the research justify any risks of harm associated with not seeking consent.

N/A

J3 Explain why it is impracticable to obtain consent (for example, due to the quantity, age or accessibility of records).

N/A

J4 Outline any known or likely reason for believing participants would have consented if they had been asked.

N/A

J5 Explain how you will ensure there is sufficient protection of participants' privacy.

N/A

J6 Explain how you plan to protect the confidentiality of data.

N/A

J7 If the results have significance for the participants' welfare explain the plan for making information arising from the research available to them (for example, via a disease-specific website or regional news media), where practicable.

N/A

J8 Explain how possible commercial exploitation of derivatives of the data or tissue will not deprive the participants of any financial benefits to which they would be entitled.

N/A

J9 Explain how you have ensured that the waiver is not prohibited by State, federal, or international law.

N/A

Upload Documents

K1 Upload any additional documents relating to your application here. If you are resubmitting your application after it has already been reviewed by the ethics committee, please attach your **point-by-point response** to the committee's questions in this Section as a separate document.

Documents

Type	Document Name	File Name	Version Date	Version	Size
OTHER PROJECT-RELATED DOCUMENTATION	Concent-Form	Concent-Form.pdf	10/02/2022	21-22	114.0 KB

Sign-off

L1 Are you the Chief Investigator for this project?

Please note that if you are a student investigator you cannot be the Chief Investigator of this application. This should be your supervisor. Please change the CI and obtain sign off from your supervisor.

- ○ Yes
- ◉ No

L1.1 The Chief Investigator must sign off this application prior to submission.

Click the *Request* button to request the CI's signature.

You will be notified via email once the CI has signed. **Once CI signature is obtained you must sign in and submit the application by clicking on the submit button on the actions menu.**