





- Overview of projects
  - Timeline, Aim, ILOs, allocation, importance to degree
- Who is involved in running this course
  - Coordinator, course director, supervisors, tutors
- Indicating preferences (OPTIONAL)
- What happens before and during Week 1 of the project



# **OVERVIEW OF PROJECTS**





### **Timetable**

30<sup>th</sup> April 2024 **Project information** 

> (Optional) 8<sup>th</sup> May 2024 **Preferences**

Allocation by week 3th June 2024 **MSc Project** 

10<sup>th</sup> June 2024

12 weeks

30<sup>th</sup> August 2024

60 credits

Semester 2 (now)

Semester 3 (soon) 4







- The aim of the project is to enable students to carry out a substantial, independent, individual project at level M
- Projects should be predominantly focussed on research, discussing relevant literature, proposed ideas/methods, evaluations, etc.
- Students will submit their dissertation and associated materials (e.g. code)
- Your allocated supervisor will guide you through this!



### **Intended Learning Outcomes**

### By the end of the course students will be able to

- Formulate and execute a project plan for an appropriate research project
- Use standard methods to conduct research (e.g. literature review, experiments, etc)
- Write a dissertation that will clearly describe the value of their research project
- Describe their work to both technical and nontechnical audiences

### Minimum Requirement for Award of Credits

- Regular attendance at meetings: engage with supervisor and supervision process
- Submission of a dissertation and associated materials (code, documentation, etc)

https://www.gla.ac.uk/coursecatalogue/course/?code=COMPSCI5086P



### Impact on your results

- Your project is critically important!
  - Taught stage (120 credits) vs Project stage (60 credits)
- Degree
  - Average over 180 credits ≥ 12.0 and project at least D3
- Degree with merit
  - Average over 180 credits ≥ 14.5 (normally) and project at least C1
- Degree with distinction
  - Average over 180 credits ≥ 17.5 (normally) and project at least B1



# WHO IS INVOLVED IN RUNNING THE COURSE?





# Projects coordinator – José Cano Reyes <a href="mailto:lose.coanormology">Jose.CanoReyes@glasgow.ac.uk></a>

- Makes sure the process runs smoothly
- Allocates supervisors
- Provides resources to support projects process (e.g. overview of dissertation writing)
- Intervenes if serious issues are encountered
- Makes sure marking is done according to University procedures
- Finalises and presents marks in exam board



#### **Course directors**

# Yehia Elkhatib < Yehia. Elkhatib @glasgow.ac.uk > - CS Kevin Bryson < Kevin. Bryson @glasgow.ac.uk > - DS

- Make sure the course runs smoothly and meets the University regulations
- Monitor issues that may arise during the course
  - Initiate remedial actions
- Conceptually own the course!
  - Once they make a ruling most often that will be the final
- Anything done outwith stipulated period/programme needs the Course Directors explicit approval



### Supervisor

- Guides the student to complete the project
  - Will meet you regularly (weekly)
  - Monitor progress at different stages of the project
  - Advise you in the writing stage
  - If you give your report early enough, they will comment on the work (light feedback on a draft)
  - You will be responsible for your work & own your work
- The best person to ask if you need a reference letter
- You are allocated an academic supervisor, you don't choose or negotiate them
  - We allocate considering the specialisms of people, e.g. Data Science to DS related research
  - Option to give preferences (next section)
- Allocation details will follow in the week prior to project start date



## **Tutors (GTAs) for Technical support**

- Tutors will be available for assistance throughout the project term
  - Roughly 2 hours per day in varying drop-in sessions on Teams
- What they will do
  - Provide technical support, e.g. around coding problems, IDEs, etc.
  - Help you through the process, provide tips and advice for resolving issues
- What they won't do
  - They won't be able to provide advice on dissertations
  - They are not here to solve your problems for you



### **Communications**

- Please try to contact the appropriate person! ©
  - For general queries, use/CC socs-msc-cs-projects@glasgow.ac.uk
- When you communicate
  - Put [MSc CS+] in the email subject title if over email (preferable)
  - State your course and supervisor's name
- For many enquiries we need to cross-check with each other, so it is important that you provide this information
- Please be professional and polite
  - I understand if there are times when things can get frustrating but we're all trying to do our best to help you undertake meaningful, interesting individual projects



### Who to talk to?

- When you have issues with the project such as questions on how to apply a method, you should always email your supervisor and ask for advice
- If you have technical issues you can get in contact with the tutors via Teams
- For any serious issues you should alert the project coordinator and include yours and your supervisor's details
- For extension requests, see the Moodle extension requests guid

By following this advice, the whole process will be more time efficient



### Important dates (tentative!)

(always refer to Moodle for up-to-date deadlines)

- W1 Monday 10<sup>th</sup> June 2024 Projects start, running for 12 weeks
  - Your supervisor will be in contact to arrange your first meeting on this week
  - Supervisor assignments will be published on Moodle the week before W1
  - If you haven't heard from your supervisor by Tuesday of W1, email them
  - If you have resits that delay project start, contact course director after your resit exam

• End of W12 (Friday 30th August 2024 16:30 hours): Project submission





# INDICATING PREFERENCES – OPTIONAL





### **Optional for MSc CS students**

- This option is available for Computer Science students ONLY!!!
- Indicate a preferred area for your project from topics within these research groups
  - FATA (Formal Analysis, Theory and Algorithms)
     <a href="mailto:(https://www.gla.ac.uk/schools/computing/research/researchsections/fata-section/">(https://www.gla.ac.uk/schools/computing/research/researchsections/fata-section/</a>)
  - GIST (Glasgow Interactive SysTems) (<a href="https://www.gla.ac.uk/schools/computing/research/researchsections/gist-section/">https://www.gla.ac.uk/schools/computing/research/research/researchsections/gist-section/</a>)
  - GLASS (GLAsgow Systems Section) (https://www.gla.ac.uk/schools/computing/research/researchsections/systems-section/)



# CS – Pick any five of the following topics

- Algorithms and Complexity (FATA)
- 2. Formal Methods (FATA)
- 3. Programming languages (FATA)
- Understandable Autonomous Systems (FATA)
- 5. Combinatorics (FATA)
- 6. Virtual/Mixed/Augmented Reality (GIST)
- 7. Socially Intelligent Technologies for Humans and Animals (GIST)
- 8. Innovative Approaches for Human Computer Interaction (GIST)
- 9. Responsible and Interactive Approaches for Data and AI (GIST)
- Responsible and Interactive Approaches for Data and AI (GIST)

- 11. Future Networks and Networked Systems (GLASS)
- 12. Industrial Control Systems Cybersecurity and Resilience (GLASS)
- 13. Parallel and Distributed Systems (GLASS)
- 14. Programming Language Implementation and Optimization (GLASS)
- 15. Cybersecurity and Privacy (GLASS)



### **Preferences CS – Deadline Wednesday 8th May**

- Fill this form before 5pm Wednesday 8th May 2024
  - https://forms.gle/ikzemtpvf7LosUMp9
- Indicate your topic preferences (Option1, Option2, ..., Option5)
- We cannot give any guarantees that you will be allocated to a member of staff whose primary research is in these topics
  - Since we need to take into account the workload of each member of staff
  - However, we will try our best to accommodate your preferences



### **Optional for MSc DS students**

- This option is available for Data Science students ONLY!!!
- Indicate a preferred area (ranking) for your project from topics within the IDA (Inference, Data, and Analysis) research group
  - (https://www.gla.ac.uk/schools/computing/research/researchsections/ida-section/)
- Indicate your preference of the following topics
  - 1. Information Retrieval, Recommender Systems & Natural Language Processing
  - 2. Data Systems & Data Applications
  - 3. Machine Learning & Mathematical Modelling
  - 4. Bioinformatics & Computational Biology
  - 5. Vision, Medical Imaging, and Robotics



### **Preferences DS – Deadline Wednesday 8th May**

- Fill this form before 5pm Wednesday 8th May 2024
  - https://forms.gle/cfivsLbKkThZeSzEA
- Indicate your topic preferences (Option1, Option2, ..., Option5)
- We cannot give any guarantees that you will be allocated to a member of staff whose primary research is in these topics
  - Since we need to take into account the workload of each individual member of staff
  - However, we will try our best to accommodate your preferences



# **SUPERVISOR CONTACT**





### **Guidelines for supervisor contact**

- 15-30 minutes supervisory time a week
  - This can be in individual or group meetings
- Supervisors could be away part of time (break, research)
  - Discuss in advance, plan your time
- Students can request additional time in advance of meeting if necessary
  - E.g. arranging impromptu meeting at any time to discuss unexpected issues, concerns, opportunities
- Attendance to weekly meetings is mandatory
  - This will be demonstrated through filling out your mandatory progress log (tracker), which will be attached to your final dissertation



### **Expectations from students for meetings**

- Complete their progress log prior to each meeting
  - Agenda of topics to discuss at the meeting, progress update, issues encountered
- Lead the meeting, addressing the topics that they have put on the agenda
  - E.g. They should timebox appropriately (e.g. 5 mins for current progress, 10 mins requirements capture, 5 mins for next actions)
- Enter a summary of the meeting into their progress log as soon as possible after the meeting (and definitely before the next meeting)
  - This should include precise action items where appropriate
- The project is ultimately the student's responsibility



# **Expectations from students for meetings (2)**

- Always listen carefully to your supervisor's advice
- However, it is your project and you must make your own decisions
- Send intermediate deliverables (e.g. initial design) to supervisor before a meeting



# THE PROJECT





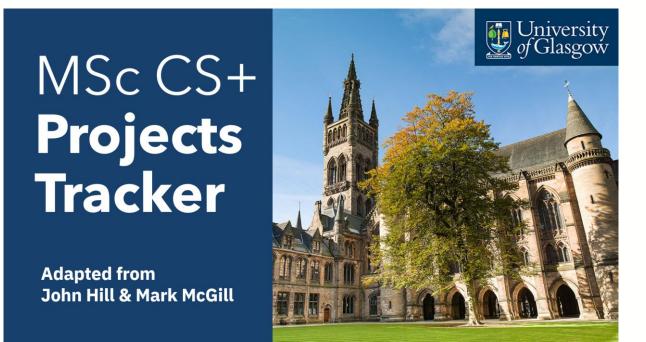
### The project...

- You are expected to work independently with guidance from the supervisor
- You must be able to demonstrate continuous progress at supervision meetings
  - The project should be developed over these 12 weeks full time (24 weeks part time)
- We will not accept submission of work done prior to the projects course, or that cannot demonstrably be seen to belong to the student
- By the submission date, students must submit a dissertation that represents the work undertaken for the project
  - To be acceptable, the dissertation must reflect work of a Masters quality



### The Project Tracker

- Found in the "Templates" section of the CS+ Moodle
- This keeps everything in one place regarding:
  - Planning and monitoring your weekly progress
  - Preparing agendas and status updates for supervisor meetings
  - Tracking outcomes of meetings and plans for subsequent weeks





## Week 1 – Agreeing topic with supervisor

- Supervisors will be in contact with you prior to/on Week 1 of the project to arrange regular weekly meetings
- Supervisors may...
  - ...ask for more details about you (e.g. your background, topics of interest, technologies/platforms you want to work with etc)
  - ...offer you a topic they have defined
  - ...or ask you to rank interests from a selection of topics they are proposing
  - Every supervisor has their own preferred process based on their experience
- In the initial meeting, student and supervisor should discuss and negotiate a topic of suitable scope, difficulty and interest
  - This will be lead by the supervisor



# Week 1 – Agreeing topic with supervisor (2)

- We aren't allowing self-defined projects nor joint projects with employers or prospective employers
- These projects are not feasible for a variety of reasons
  - e.g. compliance with GDPR and other data protection legislation, ethics issues, not being sufficiently provably independent, excessive external supervisory involvement, not meeting the leaning outcomes of the course etc
- Whilst we understand this may be frustrating to some, its important that projects are appropriate for the course, hence these restrictions



# Week 1 – Agreeing topic with supervisor (3)

- You can however discuss your own interests and topic areas with your allocated supervisor in Week 1
  - For example, you might have a project idea the supervisor is willing to adapt/modify to be suitable for the project
  - Or you might have some suggestions on how to spin the supervisor's proposed project to include your interests around specific technologies, stacks or approaches



# Week 1 – Agreeing topic with supervisor (4)

- "I'm not sure about my topic / I'm not sure it matches my interests"
- That's ok, but early communication is key here we want to resolve these issues by the end of week 1
  - Supervisors have worked hard to come up with topic ideas that take advantage of their unique expertise / background and address the learning outcomes – this is a difficult balancing act, and often requires a degree of compromise
  - The first meeting / week provides supervisors and students the opportunity to discuss, explore and amend proposed topics
  - Work constructively with your supervisor to see whether their proposed topics or ideas can be altered whilst remaining within the requirements of the programme
  - However, you will have to be flexible here



# Week 1 – Agreeing topic with supervisor (5)

- The nature and scope of your project will ultimately be decided by your supervisor
  - This is necessary because we have to ensure that your project is of appropriate academic standard for an MSc award
  - So, please do not be disappointed if you are not able to do exactly the project you
    would like to do; you need to trust that your supervisor knows best in this regard
  - Supervisors know what makes a strong project, and will guide you toward that
- By the end of Week 1, each of you should have (or be close to having) a project topic that is clearly enough defined to make progress, and will allow you to demonstrate your engagement with the learning outcomes of the course



### **Extensions / Jobs**

#### Extensions

- Getting extensions will affect when the results are released!
- However, if you end up with a situation where you require an extension... refer to the extensions policy on Moodle
- Note: any excuse regarding data loss (hard drive failure, lost work) is not a Good Cause claim; you are expected to use version control and cloud backups (e.g. OneDrive) for your dissertation and research work

#### Jobs

- You are expected to be working on the project full-time
- Unless you are on a part-time programme, you should be working FULL TIME on this project for the next 12 weeks



# HOW IS THE PROJECT ASSESSED?





### How is the project assessed?

(see marking scheme on Moodle for more details)

#### 90% - Dissertation

- The primary evidence of student output
- No matter how well a student does in the supervisor's eyes, it is the dissertation that
  is marked. It must be possible to justify the mark awarded from the dissertation
  without other reference to the student's other achievements. All other evidence (video,
  source code, raw data) is supplementary. Marks will be awarded on the basis of the
  dissertation

The dissertation is the lens through which the project is viewed



### **Dissertation**

(see marking scheme on moodle for more details)

- Problem Analysis (15%)
  - An assessment of how well the student analysed and demonstrated their understanding of the problem that their project addresses
- Outcome (Research insight / contribution) (40%)
  - Assessment of project outcome and the quality of work leading to this
- Reflection (10%)
  - Assessment of how well the student critically analysed and reflected on evaluation findings and project
- Dissertation Quality (25%)
  - Assessment of dissertation quality and how well the student has presented their work



### How is the project assessed?

(see marking scheme on Moodle for more details)

#### 10% - Professional conduct

 The assessment will also include the supervisor's judgement of the professional conduct of the student. This is an important part of the assessment and should not be taken lightly

### Conduct in meetings

- Taking a lead, preparing questions, using the time constructively, demonstrating continual progress (e.g. through screen-share demonstrations of prototypes)
- Progress Tracker (see Moodle template)
  - Taking minutes, providing weekly agenda to supervisor, maintaining progress log





# SUMMARY





### **Summary**

- Your project is a very important part of your degree, so do it meticulously
- You will be allocated a supervisor, and will know your allocation in the week prior to the project start date (this will be published on Moodle)
- Supervisors will be in touch before or on Week 1 to arrange initial and regular meeting slot, and propose/discuss a project topic for you to pursue
- You should work full-time on your project for 12 weeks
  - This includes weekly meetings with supervisor
- If you have a good reason to wish to do the project remotely, please inform the course coordinator (José) as soon as possible



### Over the course of the project, you should...

- Have regular, weekly contact with your supervisor
- Keep an up-to-date progress log including minutes of prior meetings, and agenda for next meetings
- Backup your work (dissertation, source code) using appropriate version control and/or cloud backups (e.g. OneDrive)
- Submit your dissertation and source code on Moodle by the end of Week 12



### Remember...

- Check Moodle and Teams for updates/announcements and more details
  - The student project guide it outlines our expectations for you
  - The marking scheme it outlines how projects will be assessed
- We'll be in touch by Week 1 with more details about the introduction session, (Week June 10th, place TBD) where we will cover...
  - Supervisor assignments, schedule for your periodic supervisor meetings
  - Additional support resources, including access to the "hall of fame"
- If you can't access the Moodle page, let José know over Teams ASAP
- If you have any questions, use the Q&A channel on Teams or email <u>socs-msc-cs-projects@glasgow.ac.uk</u>



