

Attendees: Peter Stuckey (Chair-PS), Achini Erandi (AE), Andres Munoz Acosta (AA), David Bergmann (DB), Jessica Leung (JL), Zahra Namazian (ZN), Andreas Ernst (AE),

Apologies: Mark Fackrell

Meeting to discuss planning of 2022 activities of the E+T committee.

1. Common platform/training in open source code

We should plan to give a training session to OPTIMA members on github/version control. We should see if an existing offering can fulfill this role. Otherwise an OPTIMA member with sufficient background could run the training. (Guido is a possibility from Monash).

Does the library (at either institution) run suitable courses on code fluency.

We should ensure that the session counts to PhD training hours.

ACTION: Peter: Ask Jason Nguyen (OPTIMA SE) to setup a shared repository and guidelines for OPTIMA software.

ACTION: Andres will look into Melbourne offerings in this space, perhaps will be able to give a short course if no existing offering is available.

2. OPTIMA Annual Conference where HDR students present their work

We should form a sub-committee to plan the Annual Conference to ensure it will be attractive to industry partners. Things to consider apart from student presentations:

- + ensure students present at a level that engages industry partners
- + poster session for a chance to discuss with students?
- + industry invited speakers?
- + end users to speak?
- + panel session or discussion forum?

SubCommittee membership: Jessica Leung, David Bergmmann, Zahra Namazian, **Charlotte** Hurry .. to we need more?

ACTION: Peter: determine from Charlotte the current anticipated date for this conference.

RESULT: Tuesday 16th November 2022

ACTION: Subcommittee: plan a first meeting.

ACTION: Exec: Discuss how we can elicit smaller problems from our partners which may be the basis of hackathons or masters student projects.

3. Develop a MOOC in interdisciplinary optimisation

Peter volunteered to lead this given he has some experience in developing MOOCs.

Ideally this would be a micro-certification. This would be an advantage of using one of the existing MOOC providers.

Potential topics

- + Formulating a problem
- + Modelling for optimisation (overlap with existing MiniZinc courses?)
- + Developing a meta-heuristic solution
- + Multi criteria optimisation
- + Uncertainty

A more general question for providing micro-certification. Are their existing university offerings that we can piggy back on to create micro-certifications in the Optimisation space?

ACTION: Peter: determine if this can be part of Monash EdX or Online offerings

ACTION: Peter: Ask Kate to speak to Melbourne about whether this could be a Coursera course.

ACTION: Peter/Charlotte: organize a meeting of OPTIMA CI/AIs to discuss the material that would be included in such a MOOC. Ideally face to face.

4. Develop a mechanism for Partner Organizations to give feedback or raise issues.

The partner organization should be invited to the annual review, although since this has a different role, they need not necessarily come. Before the annual review we should have some discussion with the partner organization. It seems the next light weight mechanism for this is simply a phone call from some one appointed by the E+T committee to the appropriate industry contact.

A form to fill in just adds some burden to the relationship.

We also need an anytime mechanism. I think we should make it clear to the partners that they can call Kate/Peter/Charlotte at any time with an issue.

ACTION: Charlotte: Use the starting dates of each of our existing students to determine an appropriate timeline for phone calls.

ACTION: Peter: Assign partner conversations to senior academics on the committee:
Peter/Andreas/Mark

5. Allocate an industry mentor for each student funded by OPTIMA.

This should already be in place for our PhD students. When we have masters and other students we will need to consider this further

6. Evaluate at Annual review the effectiveness of supervisory team and industry mentor.

Apart from the phone call discussed in point 4 above we didnt have much more on this point.

We should formally define the Annual Review OPTIMA process

ACTION: Peter/Charlotte: Add the formalization of Annual Review OPTIMA process to next E+T meeting agenda

7. Organize short courses for HDRs and ECRs on non-technical skills.

ACTION: Andres: Will determine the existing short courses at Melbourne that we could use for developing non-technical skills, and their costs if any.

8. Create an attractive student exchange program.

Much of this relies on the relationship with our International Partner Organizations, which is mainly through Kate.

ACTION: Peter+Charlotte: Discuss with Kate how we should progress this.

9. Actively promote scholarships for women in STEM, first nations and other marginalized groups.

This should be a deliberate part of our thinking when searching for PhD candidates to fill OPTIMA scholarships.

iSTEM Co is a company that specializes in placement of marginalized groups into STEM roles.

Perhaps we can involve them in advising OPTIMA students in their last year, or advise us on these issues. David can provide an introduction.

Major problem in this area is that the pipeline of incoming students in these categories is small, and the attrition rate high. We should be attempting to grow that pipeline in our outreach activities.

ACTION: EDI committee: to examine if we need better policies, and if iSTEM Co can help.

10. Build a research culture that promotes ECR inclusiveness.

It seems like the best way to promote ECRs is to have a formal mentorship program as part of the centre, and to also try to build cross links amongst different researchers in OPTIMA.

Aiming to include ECRs in supervision teams is a great way to initiate collaboration amongst senior and junior CI/AIs.

Is there a possibility of small seeding grants to fund some new research collaborations?

ACTION: E+T Committee: Collect sample mentorship documents from different organizations and share them with other committee members. (share them with me and

ACTION: E+T Committee: Organize the next E+T meeting to define a mentorship scheme for OPTIMA. Someone may want to volunteer to chair the committee, for soft skills experience.

ACTION: Exec: Discuss a micro talks get together for CIs and AIs (and HDRs) to deepen relationships across OPTIMA.

11. Nominate centre members for awards.

This should be on the mind of all senior CIs. It will be managed by Exec.

12. Create opportunities for OPTIMA personnel career advancement.

We discuss the idea of a grant brainstorming session in early december where CIs/AIs can come together to discuss grant proposals, get feedback and potential collaborators.

ACTION: Exec: Discuss the possibility/workability of grant brainstorming at Exec.

Finally Andreas suggested we might want to group and simplify some of the tasks of the E+T committee.

ACTION: Andreas: report on a grouping and/or simplification of tasks for the committee at next meeting.