

Co-Authorship Form

This form is to accompany the submission of any PhD that contains published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements. Co-authored works may be included in a thesis if the candidate has written all or the majority of the text and had their contribution confirmed by all co-authors as not less than 65%.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Cooper, J. and Nicolescu, R. (2018) 'Alternative Representations of P Systems Solutions to the Graph Colouring Problem', in Dineen, M. J. and Nicolescu, R. (eds) Proceedings of ACMC 2018. Auckland, New Zealand: Centre for Discrete Mathematics and Theoretical Computer Science, University of Auckland, Auckland, New Zealand (Asian Conference on Membrane Computing), pp. 340–357.

This material in this paper is used in Chapter 5: The Graph Colouring Problem.

Nature of contribution by PhD candidate	Devised cP system; programmed and ran experiments; prepared figures; drafted and revised manuscript
Extent of contribution by PhD candidate (%)	80


CO-AUTHORS

Name	Nature of Contribution
Radu Nicolescu	Provided editorial support. Assisted with finalising cP system.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ that the candidate wrote all or the majority of the text.

Name	Signature	Date
Radu Nicolescu		28/09/2021