Athanasios (Naso) Evangelou-Oost

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LinkedIn: nasosev

GitHub: github.com/nasosev



EDUCATION

The University of Queensland St Lucia, AU Ph.D. in Computer Science (in progress) 2020-2023 Thesis: "Concurrent valuation algebras" Advisors: Ian J. Hayes, Larissa Meinicke The University of Queensland St Lucia, AU B.Math. (Honours Class I), GPA: 7.0/7.0 2018-2019 - Thesis: "Homological aspects of Morse-Bott theory" - Advisor: Joseph F. Grotowski University of Tasmania Sandy Bay, AU 2014-2015 B.Sci. in Pure Mathematics (Honours) (incomplete; 80% coursework completed), GPA: 7.0/7.0 - Thesis: "Combinatorial structures on non-crossing partitions" Advisor: Des G. FitzGerald University of Tasmania Sandy Bay, AU B.Sci. in Pure Mathematics, GPA Maj.: 6.9/7.0 2010 - 2012

Experience

Oneironaut Brisbane, AU 2022 -

Founder, Principal Mathematician & AI Engineer

- Independent consultancy for mathematical research and software development
- Utilising artificial intelligence, applied category theory, formal methods, functional programming

Sirius-beta Brisbane, AU

Research Scientist & Development Lead

2022-

- Currently leading a project funded by the Defence Science and Technology Group (DST) through their Next Generation Technology Fund (NGTF)
- This project falls under an Industry Competitive Evaluation Research Agreement (ICERA), managed by the Information Warfare STaR Shot initiative

Independent Consultant

AU

Mathematician, Developer, Technician, Tutor

2014-2021

Independent consultant for mathematical research, information technology, and education

AMA Dalat VN

Teacher of English as a Foreign Language

2013-2014

 Experienced TOEFL teacher skilled in preparing students for English language proficiency exams and delivering engaging lessons tailored to meet individual needs

PUBLICATIONS

- [1] Naso Evangelou-Oost, L. Meinicke, C. Bannister, and I. J. Hayes, Trace models of concurrent valuation algebras, 2023. arXiv: 2305.18017 [cs.L0]. [Online]. Available: https://arxiv.org/abs/2305.18017, Accepted; to appear in Springer Lecture Notes in Computer Science series.
- [2] **Evangelou-Oost, Naso**, C. Bannister, and I. J. Hayes, "Contextuality in distributed systems", in *Relational and Algebraic Methods in Computer Science*, R. Glück, L. Santocanale, and M. Winter, Eds., Cham: Springer International Publishing, 2023, pp. 52–68, ISBN: 978-3-031-28083-2. [Online]. Available: https://link.springer.com/chapter/10.1007/978-3-031-28083-2_4.
- [3] I. Dolinka, J. East, **Athanasios Evangelou**, D. FitzGerald, N. Ham, J. Hyde, N. Loughlin, and J. D. Mitchell, "Enumeration of idempotents in planar diagram monoids", *Journal of Algebra*, vol. 522, pp. 351–385, 2019, ISSN: 0021-8693. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0021869318306550.
- [4] I. Dolinka, J. East, **Athanasios Evangelou**, D. FitzGerald, N. Ham, J. Hyde, and N. Loughlin, "Enumeration of idempotents in diagram semigroups and algebras", *Journal of Combinatorial Theory, Series A*, vol. 131, pp. 119–152, 2015, ISSN: 0097-3165. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S0097316514001563.

TEACHING

• Teaching Assistant at The University of Queensland Functional & Logic Programming (COMP 3400)	2021, 2022
• Teaching Assistant at The University of Queensland Reasoning About Programs (CSSE 3100)	2021, 2022
• Teaching Assistant at The University of Queensland Concurrency: Theory and Practice (CSSE 7610)	2021

SKILLS

- **Programming:** Haskell, F#, Python, Mathematica, Isabelle/HOL
- Machine Learning: Scikit-Learn, Keras, PyTorch
- Tools/Techs: SQL, Git, LATEX
- Web: TypeScript

LANGUAGES

- English: Mother tongue
- French: Proficient, DALF C1
- Vietnamese: Beginner
- German: Beginner

SCHOLARSHIPS AND AWARDS

• Ethel Raybould Prize in Mathematics, The University of Queensland	2020
• Category 1 Earmarked RTP scholarship, The University of Queensland	2020 – 2023
• Dean's Commendation for Academic Excellence, The University of Queensland	2018, 2019
• Tasmania Honours Scholarship, University of Tasmania	2012
• Dean's Roll of Excellence, University of Tasmania	2010, 2012

CONTRIBUTED TALKS

• School of Electrical Engineering & Computer Science (EECS), Research Seminar, The University of Queensland Concurrent valuation algebras	1 2023
• Formal Methods in Australia/New Zealand, The University of Queensland Trace models of concurrent valuation algebras	2023
• Relational and Algebraic Methods in Computer Science, Technologiezentrum Augsburg Contextuality in distributed systems	2023
• School of Electrical Engineering & Computer Science (EECS), Research Seminar, The University of Queensland Contextuality in distributed systems	1 2023
• Formal Methods in Australia/New Zealand, The University of Queensland Modelling distributed specifications with simplicial sets	2022
• School of Mathematics & Physics (SMP), Analysis Seminar, The University of Queensland Homological aspects of Morse-Bott theory	2019
• School of Mathematics & Physics (SMP), Special Topics, The University of Queensland <i>Hodge theory</i>	2019
• School of Mathematics & Physics (SMP), Special Topics, The University of Queensland Čech cohomology of a cover	2018
• School of Mathematics and Physics (SMP), Quantum Field Theory Seminar, The University of Queensland Representation theory of semisimple Lie algebras	2018
• School of Natural Sciences, Mathematics Seminar, University of Tasmania Combinatorial structures on non-crossing partitions	2015
Organisation	
• Co-organiser of a Category Theory reading group with Angela Wren, The University of Queensland Text: "Basic Category Theory" by Tom Leinster	2021
• Organiser of a Topos Theory reading group, The University of Queensland Text: "Sheaves in Geometry and Logic: A First Introduction to Topos Theory" by Saunders Mac Lane and Ieke Moerdijk	2020