Alexandros Singh

Curriculum Vitæ

☑ singh@lipn.fr ③ lipn.fr/~singh/ Born 14/09/1994 Citizenship: Greek



Employment

Université Sorbonne Paris Nord

Teaching assistant (as PhD student)

France 2021–now

Education

Université Sorbonne Paris Nord

PhD student in Informatics

Oct. 2019-now

Thesis Project: Combinatorics of maps and λ -terms.

National and Kapodistrian University of Athens, National

Greece

France

Technical University of Athens

Master of Science in Algorithms, Logic, and Discrete Mathematics

2017-2018

Thesis Project: Enumeration of Cactus Minor-Obstructions for k-Apex Sub-unicyclic Graphs.

Ionian University

Greece

Bachelor of Science in Informatics (ranked 1st in class)

2013-2017

Thesis Project: Design and Implementation of Qumin, a Quantum Programming Language.

Professional and academic experience

Member of the LambdaComb project (ANR PRC grant)

2021-now

Member of the organising committee for the 15th workshop

Computational Logic and Applications CLA'20

2020

2019-now

Co-organiser of the graduate student seminar

LIPN, Université Sorbonne Paris Nord

Intern 2018–2019

IRIF, Université de Paris

Project on quantum machine learning

Intern 2015-2016

Ionian University

Project on quantum programming

Teaching and mentorship

Programmation fonctionnelle (Licence 2 Informatique)

2022

Université Sorbonne Paris Nord

TP, 15 hours.

Informatique 4 : Algorithmique

2022

Université Sorbonne Paris Nord

TP, 12 hours.

Architecture et système (Licence 2 Informatique)

2021-2022

Université Sorbonne Paris Nord

TP and TD, 28.5 hours.

Spécifications algébriques et test logiciel (Licence 2 Informa-

2021-2022

tique)

Université Sorbonne Paris Nord

TD, 18 hours.

Computer Programming

2015-2016

Ionian University

Taught programming (in C++), oversaw students and graded exercises.

Intro To Quantum Programming (Workshop)

2016

Ionian University

Hosted the first student's workshop on quantum computation and programming in the Ionian University.

Theory of Computation

2016

Ionian University

Mentor of student projects.

Quantum Computation

2016

Ionian University

Mentor of student projects.

Selected Talks

Combinatorics and Arithmetic for Physics: special days

2021

Institut des Hautes Études Scientifiques (IHÉS)

Asymptotic Distribution of Parameters in Trivalent Maps and Linear Lambda Terms.

AlGCo Seminar

2021

LIRMM, Université Montpellier

Asymptotic Distribution of Parameters in Trivalent Maps and Linear Lambda Terms.

—— Selected publications

Journal articles:

- 1. A. Leivaditis, A. Singh, G. Stamoulis, D. M. Thilikos, K. Tsatsanis, and V. Velona, *Minor-obstructions for apex sub-unicyclic graphs*. **Discrete Applied Mathematics**, 2020.
- 2. A. Leivaditis, A. Singh, G. Stamoulis, D. M. Thilikos, and K. Tsatsanis, *Minor obstructions for apex-pseudoforests*. **Discrete Mathematics**, 2021.

Conference proceedings:

- 3. O. Bodini, A. Genitrini, M. Naima, and A. Singh, Families of monotonic trees: Combinatorial enumeration and asymptotics. Computer Science Theory and Applications, 2020.
- 4. A. Leivaditis, A. Singh, G. Stamoulis, D. M. Thilikos, K. Tsatsanis, and V. Velona, *Minor-obstructions for apex sub-unicyclic graphs*. **EuroComb 2019, Acta Mathematica Universitatis Comenianae**, 2019.

Preprints:

5. O. Bodini, A. Singh, and N. Zeilberger, Asymptotic distribution of parameters in trivalent maps and linear lambda terms. arXiv, 2021.