

Alexandros Themelis

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EDUCATION

UNIVERSITÉ PARIS-CITÉ

M2 LEVEL MSc STUDENT AT THE
PARISIAN MASTER OF RESEARCH IN
COMPUTER SCIENCE (MPRI)
September 2023

UNIVERSITY OF ATHENS

UNDERGRADUATE DEGREE IN
DEPARTMENT OF INFORMATICS &
TELECOMMUNICATIONS
October 2019- July 2023
GPA: 8.02/10

Track A (conforming to ACM
"Computer Science" curriculum)
Specialization: Foundations of
Computer Science

Github: [AlexThemelis](#)
LinkedIn: [Alexandros Themelis](#)

SKILLS

PROGRAMMING

Mathematical Software:

SageMath • MatLab

Programming Languages:

C • C++ • Python • Rust

Had interaction with:

OCaml-based provers

(F*, Why3, CryptoVerif) • Java • Prolog •

Assembly(MIPS) • SQL

MISCELLANEOUS

Shell programming • git • CGAL (The
Computational Geometry Algorithms
Library - C++) • zkSNARK programming
(arkworks, dusk_network/plonk) • \LaTeX •
Beamer(\LaTeX) • Microsoft Office

TRAININGS

Specialization trainings from the
NKUA, Accesibility Unit:
Support for students on the Autism
Spectrum • Guiding techniques for blind
students • Interaction with assistance
dogs • Guiding techniques for students
who use wheelchairs • Support for
students with hearing loss • Support for
students with print-disabilities

LANGUAGES

Greek: Native, English: Proficiency (C2)
French: Elementary (around A2 level)

PROJECTS

- 2024 M2 Internship (March-August), IRIF - Paris Cité University,
"Advanced Post-Quantum Signatures", supervised by Geoffroy Couteau
- Working on threshold Post-Quantum Signatures based on Lattices
- Code-based signatures via an MPC-in-the-head approach
- 2023 Eulambia, Advanced Technologies Ltd, 1 month Summer Internship,
- Presentation of Post-Quantum Primitives (Lattice-based cryptography)
- Experimentation with existing implementations PQC KEMs
- Hybrid (QKD/PQC) construction
- 2022-2023 Thesis: Hash-based signatures with the use of SNARKS (link),
theoretical research and implementation with PLONK in Rust,
supervised by Pyrros Chaidos

PARTICIPATIONS

- 2023 Participated in 1st BEST Patras Hackathon 2023,
Cloud architecture design on Amazon Web Services (link)
- 2022-2023 Active Member @ Google Developer Student Club - University Of Athens
- 2022 Erasmus CIVIS exchange student to Universidad Autonoma de Madrid
for the Spring Semester
- 2020 Participated in the IMC - International Mathematics Competition (Online)
- 2019-2023 Participating in preparation lessons for the SEEMOUS and IMC contests

SEMINARS/WORKSHOPS

- 2024 Diophantine Equations Seminar: Elliptic Curves, Modular Forms
and Modular Method, 2-month weekly seminar, AUTH
- 2024 Sage Days 123 - I-sage-ny Days, January 2024, Leuven
- 2023 18th Athens Colloquium on Algorithms and Complexity
- 2023 Athecrypt 2023
- 2022 20th Annual Athens Programming Language Seminar
- 2022 Summer School in Post-Quantum Cryptography 2022, Budapest
- 2022-2023 57th/58th Summer School at NCSR DEMOKRITOS
- 2022 4th MATH@NTUA summer school on Number Theory and Cryptography

EXTRACURRICULAR ACTIVITIES

- 2023-2024 Member of the Université Paris Cité Endurance Running Team
- 2021 3rd place at Track and Field Greek National Championship U23 - 4x400
- 2019 Graduated from Music High School of Pallini (18.9/20)
Perfect score (20/20) in Mathematics section
in the Greek National University Entrance Exams

VOLUNTEERING

- 2023 Technical Support in the seminar "Cinema and Disabilities", Cinema Sector,
University of Athens Cultural Club
- 2022 Lab assistant at the undergraduate class "Introduction to Programming"
- 2021-2023 Volunteer at Voluntary Service Accesibility Unit NKUA
Helped on studying the courses "Digital Signal Processing",
"Operating Systems", "Cryptography" students on the Autism Spectrum
Helped on studying the courses "Object-oriented programming",
"Systems programming" a student with ADHD
- 2020 Volunteer at UOA open days, Dept. of Informatics & Telecommunications