

Dr. Giacomo Pope

Principal Security Consultant at **NCC Group**
Researcher in isogeny-based cryptography

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Occupation

NCC Group	Principal Security Consultant	2021 – Present
<ul style="list-style-type: none">Member of the cryptography services team, reviewing cryptography architectures, protocols and implementations for security, robustness and correctness across a diverse range of platforms and programming languages.		
University of Bristol	Affiliated Researcher	2022 – Present
<ul style="list-style-type: none">Researcher in post-quantum cryptography with the School of Computer Science, specialising on isogeny-based cryptography		

Projects

CryptoHack	Co-founder	https://cryptohack.org/
<ul style="list-style-type: none">A gamified cryptography education platform with an emphasis on breaking insecure implementations of modern cryptography with over 100,000 users.		
SQIsign	Contributor	https://sqisign.org/
<ul style="list-style-type: none">SQIsign is a post-quantum, isogeny-based digital signature algorithm with compact keys and signatures. It is currently being considered for standardisation in the NIST post-quantum project.		

Previous Occupation

Northrop Grumman	Software Engineer	2020 – 2021
University of Liverpool	Ph.D. Student	2016 – 2020

Research Papers

Simpler and Faster Pairings from the Montgomery Ladder	CiC, 2.2, 2025
Radical 2-isogenies and cryptographic hash functions in dimensions 1, 2 and 3	PKC 2025
SQIsign2D-West: The Fast, the Small, and the Safer	ASIACRYPT 2024
An Algorithmic Approach to (2,2)-isogenies in the Theta Model and Applications to Isogeny-based Cryptography	ASIACRYPT 2024
FESTA: Fast Encryption from Supersingular Torsion Attacks	ASIACRYPT 2023
A Direct Key Recovery Attack on SIDH	EUROCRYPT 2023

Education

Ph.D.	Department of Mathematics, University of Liverpool	2016 – 2020
M.A.St.	Master's in Mathematics, University of Cambridge	2014 – 2015
M.Phys.	Master's in Physics, University of Exeter	2010 – 2014