

Nick Dimitriou

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Education

MSc Information Security: Distinction 78% 2022 - 2023

University College London, UK

- *Dissertation:* Threshold, Asynchronous and Privacy-preserving Single-Sign-On
Supervisors: Dr. Philipp Jovanovic, Dr. Alberto Sonnino
- *Modules:* Privacy Enhancing Technologies, Cryptography, Cryptocurrencies, Computer Security, Malware, People and Security, Research in Information Security

BSc Management with Information Technology: First Class Honours 79% 2018 - 2022
Dean's Award for Excellence,

Henley Business School at University of Reading, UK

- *Dissertation:* How effective is a budget tracking app in improving the spending habits of undergraduate university students?
Supervisors: Dr Markos Kyritsis
- *Key Modules:* Programming, Software Engineering, Human Computer Interaction, Neurocomputation, AI, Data Science, Data Visualisation, Technology Advisory Practices

Greek National Final Exams: 19.1/20 (fourth higher in Greece) 2017 - 2018

Protypo Athinon School, Greece

- *Modules:* Math, Programming, Economics, Writing

Work Experience

Applied Cryptographer Intern, January 2024 - Present

Nethermind, London, UK

- ZK Email: Developed a ZK Email solution, prove knowledge of some information in your email without revealing it, for the Mina blockchain
- Obol V2: Partnered with Obol to deliver the next generation of Distributed Validator Technology for Ethereum

Skills: Rust, Zero-knowledge proofs, Typescript, identity-based encryption

Junior Software Engineer - Mobile Developer, July 2020 - December 2021

Totalmobile Ltd, Newbury, UK

- Barcode Scanner: Directed development of a refined barcode scanner using real-time image processing techniques to achieve efficient and swift scanning. Resolved performance issues, reducing scan time from 6 seconds to 4 seconds for a set of 10 barcodes
- Logging tool: Designed a tool to streamline extraction of device logs during user issues, which allowed the support team to effortlessly extract logs from any mobile device
- New OS approval testing: Collaborated on ensuring app compatibility with latest Android and iOS operating systems upon release
- Troubleshooted bugs, conducted thorough testing of new features, and ensured alignment with ISO 27001 certification practices

Skills: Collaborated for effective teamwork, developed with Cordova and Native Android and iOS, utilized CPP for native mobile development, leveraged the Spring framework for backend, programmed desktop applications for Windows in C#, and scripted in Perl to expedite routine development processes

Junior SQL Programmer,

August 2019 - September 2019

Binary Logic SA, Athens, Greece

- Reporting tool: Leveraged SQL Server and C# to design a tool that enabled management and clients to generate reports

Skills: Gathered requirements (collaborated with management and clients to determine tool needs), SQL Server, C#

Math Teacher Assistant (4 hours per week),

October 2018 - May 2019

Bohunt Wokingham School, Reading, UK

- Supported the teacher in quiz design, paper grading, leading and planning some topics
- Tutored students facing mathematical challenges to accelerate progress and align learning pace with class standards

Skills: Communication skills (taught kids ensuring they understood lessons), Problem-solving skills (strengthened through mentoring and tutoring using unique methods to assist struggling students)

Research Interests

Pairing-based cryptography, Zero-knowledge proofs, Anonymous credentials, Data privacy, Information Security

Technical Skills

- Programming Paradigms: Procedural, Object Oriented
- Back-end Development: With Java (Spring Framework), CPP, C#
- Mobile Development: Experienced with the use of Cordova, React Native, Flutter, to create cross-platform applications. Additionally, proficient in native app development with Java and Kotlin or Android and Objective-c and Swift for iOS
- AWS: As part of the benchmarking testing in the dissertation, Amazon's EC2 was used to create servers to run the code to create servers, to run my code.
- Operating Systems: Linux (daily drive), Windows (used to daily drive and partitioned SSD), MacOS (while working in Totalmobile)
- Relational Database: SQL Server, PostgreSQL
- Project Tracking: Jira, YouTrack, Notion
- Version Control: Git, GitHub

Extra-Curricular activities

Write Code for Individual Projects

- Developed a mobile app enabling investors to track stock investments. The development was done in Flutter to create a native-looking cross-platform app and with the help of the Yahoo API
- Crafted a mobile app facilitating Greek citizens in sending requisite text messages for outdoor permission during the Covid lockdown
- Raspberry Pi projects: Developed automation for home appliances, created an ad-blocker for my whole network, implemented it as a secure VPN etc.

Serve Food in Shelters

- During the Christmas period, I serve food in a Greek shelter

Hobbies

- Swimming: Used to swim at a professional level
- Playing chess: Achieved a rating of 1100