Antoine DURAND

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Post-Doc - Computer science

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Publications

2022   **The devil hides in the model: Reviewing Blockchain and BFT protocols**, *Springer, LNNS*.
Blockchain and Applications (BLOCKCHAIN)

2021   **Method for detecting anomaly(-ies) in a blockchain network**, *Patent US20230007035A1*.
Owned by Bull SA (ATOS group) & IRT System-X

2020   **The StakeCube blockchain : Instantiation, Evaluation & Applications**.
Second International Conference on Blockchain Computing and Applications (BCCA).

2019   **STAKECUBE: Combining Sharding and Proof-of-Stake to build Fork-free Secure Permissionless Distributed Ledgers**, *Springer, LNCS*.
The International Conference on Networked Systems (Netys)

2018   **Consortium blockchains: Overview, applications and challenges**, *IARIA*.
International Journal On Advances in Telecommunications

2017   **Data Aware Defense : towards a generic and practical ransomware countermeasure**, *Springer LNCS*.
Nordic Conference on Secure IT Systems (NordSec)

Experience

January '22 – May '22   **Post-doc**, *Télécom Paris*, Paris.
Blockchain protocol analysis

2017–2021   **PhD in Distributed Computing and Cryptology**, *Institut de Recherche Technologique - SystemX*, Télécom Paris, Atos-Bull, Institut Polytechnique de Paris.
Byzantine consensus and blockchain: Model unification and new protocols.
Part of the Blockchain Advanced Research and Technology (BART) joint research initiative.

July '15 – July '16   **Part-time developer**, *RedBite Solutions*, Cambridge, UK.
Android development

June – August '16   **Malware analysis Internship**, *TAMIS team*, INRIA Rennes.
Setup of an automated platform for malware analysis. Writing a kernel ransomware detection solution

October – June '17   **Security Audit Internship**, *MondoBrain Inc*, Paris.
Security audit of a web application and related services

Education

2016–2017   **Master in Cryptology and Cybersecurity**, *Bordeaux University*.
Labelled "SecNumEdu" by the French National Cybersecurity Agency (ANSSI)

2014–2017   **Engineering Dimploma - Computer Science**, *ENSEIRB-MATMECA*, Bordeaux.
French Graduate Engineering School

Additional

Skills   Coq, C/C++, Java, Python, VCS

Languages   French (native), English (proficient, TOEIC 965/990)

Interests   Climbing, reading, lockpicking