

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	Jorge		
Family name	Blasco Alís		
Gender (*)	Male	Birth date (dd/mm/yyyy)	16/05/1984
Social Security, Passport, ID number	51085782E		
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Open Researcher and Contributor ID (ORCID) (*)	0000-0003-4392-9023		

(*) *Mandatory*

A.1. Current position

Position	Profesor Titular		
Initial date	03/08/2022		
Institution	Universidad Politécnica de Madrid		
Department/Center	Computer Systems	<u>ETSISI</u>	
Country	Spain	Teleph. number	910673559
Key words	Cyber security, malware, software analysis		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
01/2019-07/2022 (43 months)	Senior Lecturer /Royal Holloway, UoL / UK / New Position
09/2016-12/2018 (28 months)	Lecturer / Royal Holloway, UoL / UK / Promotion
07/2014-08/2016 (26 months)	Postdoctoral Researcher, City, UoL / UK / New Position
01/2009-06/2014 (54 months)	Ayudante, Universidad Carlos III de Madrid, Spain / N. Pos.
09/2007-12/2008 (15 months)	Becario/PIF, Universidad Carlos III de Madrid, Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Programa Oficial de Doctorado en Ciencia y Tecnología Informática	Universidad Carlos III de Madrid	2012
Máster en ciencia y tecnología informática	Universidad Carlos III de Madrid	2008
Ingeniero en Informática	Universidad Carlos III de Madrid	2007

Part B. CV SUMMARY (max. 5000 characters, including spaces)

I am an Associate Professor (Profesor Titular) in the Computer Systems Department (Departamento de Sistemas Informáticos) at Universidad Politécnica de Madrid. Before that, I was a Senior Lecturer in Information Security at Royal Holloway, University of London, an Academic Centre of Excellence in Cyber Security Research and Education in the UK. I have more than 8 years of post-doctoral research experience in the UK. My contributions to the field of cyber security range from research papers in leading conferences and journals to vulnerability disclosures, technical reports, spin outs and research lab leadership among others.



My main research area today centres around Software Security. Within this area I mainly focus on identifying security and privacy properties in software including software vulnerabilities, privacy leaks and malicious behaviours. Given the key role of software systems in modern society, their security is a key element needed to maintain a fully functioning and resilient society. My research has resulted in tangible benefits to industry and society including responsible disclosures of vulnerabilities in Android and mobile applications, recommendations on privacy policy improvements and keynote presentations to industry leaders and members of the UK parliament.

I obtained my, PhD from Universidad Carlos III de Madrid in 2012. My dissertation was awarded the Best PhD award in Computer Science from the University that year. After my PhD I worked for 2 years at the same institution, being an active member of the COSEC research group. During this time, I participated in research proposals and projects for a value close to 1 million €. I also published several research papers in international journals in the JCR and international conferences.

In 2014 I moved to City, University of London to work as a postdoctoral researcher on a multi-University EPSRC-funded project focused on Android Malware. While being part of this project, I developed analysis techniques and machine learning-based methods to detect mobile malware. McAfee (a well-known security vendor) highlighted his discoveries on a Threat Report as part of an effort to tackle a novel kind of Android malware. During this time, I started a research line on video steganography for counter-terrorism via a successful competitive funding call of €350K. This resulted in a spin out company from City, University of London (Raven Science) which I co-founded. Raven Science currently holds contracts with the London Metropolitan Police to combat extremist and terrorist content online.

In 2016 I moved to Royal Holloway, University of London as a Lecturer (Associate Professor). In 2018 I was named the MSc in Information Security Programme director. In 2019 I was promoted to Senior Lecturer. During my time at Royal Holloway, I have obtained £60K in funding from competitive calls and founded my own research group, the Systems and Software Security Lab (S3Lab). The S3Lab was composed of three other members of staff and has 12 PhD students. During this time at Royal Holloway, I published more than 20 research works including JCR-Q1 journals, top cyber security conferences (USENIX Security, PETS). My research has resulted in several responsible disclosure processes affecting software products like Android (by Google). Overall, my work has been cited more than 1100 times. My service includes being a reviewer of several JCR journals, JCR journal editorship and being part of the programme committee of several national and international conferences. I am also a reviewer for the UK funding body of my research area.

As head of the S3Lab, I focused on a research program to tackle the security and privacy of software and app-enabled ecosystems. This research program is underpinned by the development of new methods to identify and track sensitive information-flows on various platforms (Android, IoT, Browsers, IDEs, Productivity tools, etc.). I have supervised three PhD student and multiple MSc and BSc students. I have currently supervise another 4 PhD students, all of them on track to successfully complete their dissertations in the next two years.

I recently moved back to Spain to establish a new research group in cybersecurity within the Computer Systems department in Universidad Politécnica de Madrid. My plan is to port the S3Lab model I developed at Royal Holloway to my new research position.

Part C. RELEVANT MERITS

C.1. Publications

1. Towards Improving Code Stylometry Analysis in Underground Forums M Tereszowski-Kaminski, S Pastrana, J Blasco, G Suarez-Tangil. Proceedings on Privacy Enhancing Technologies 2022 (1), Sciendo, 126-147.
[Core A, Class 2, Acceptance Rate 28%]

2. argXtract: Deriving IoT Security Configurations via Automated Static Analysis of Stripped ARM Cortex-M Binaries, P Sivakumaran, J Blasco, Annual Computer Security Applications Conference ACSAC 2021, Association for Computing Machinery, 861-876
[Core A, Class 2, Acceptance rate 24.5%]
3. Collective Information Security in Large-Scale Urban Protests: the Case of Hong Kong, Martin Albrecht, Blasco Alis, Jorge, Jensen, Rikke Bjerg, and Lenka Marekova
In *USENIX*, April, 2021.
[Core A, Class 1, Acceptance Rate 18,75%]*
4. Detecting video-game injectors exchanged in game cheating communities, Panicos Karkallis, Jorge Blasco, Sergio Pastrana, and Suarez de Tangil Rotaecche, Guillermo.
In *26th European Symposium on Research in Computer Security (ESORICS) 2021*, Springer, July, 2021.
[Core A, Class 1, Acceptance Rate 20,2%]
5. Shipp, Laura; Blasco, Jorge. 2020. How private is your period?: A systematic analysis of menstrual app privacy policies Proceedings on Privacy Enhancing Technologies. Sciendo. 2020-4, pp.491-510.
[Core A, Class 2, Acceptance Rate 23%]
6. Marcos Tileria; Jorge Blasco; Guillermo Suarez Tangil. 2020. WearFlow: Expanding Information Flow Analysis To Companion Apps in Wear OS Proceedings of 23rd International Symposium on Research in Attacks, Intrusions and Defenses (RAID 2020). USENIX.
[Core A, Class 1, Acceptance Rate 23.2%]
7. Pallavi Sivakumaran; Jorge Blasco. 2019. A Study of the Feasibility of Co-located App Attacks against BLE and a Large-Scale Analysis of the Current Application-Layer Security Landscape Proceedings of the 28th USENIX Security Symposium. USENIX.
[Core A, Class 1, Acceptance Rate 15,5%]*
8. Blasco, Jorge; Chen, Thomas M; Muttik, Igor; Roggenbach, Markus. 2018. Detection of app collusion potential using logic programming. Journal of Network and Computer Applications. Academic Press. 105, pp.88-104.
[Impact Factor: 6.2 Q1]
9. Blasco, Jorge; Tapiador, Juan E; Peris-Lopez, Pedro; Suarez-Tangil, Guillermo. 2015. Hindering data theft with encrypted data trees Journal of Systems and Software. Elsevier. 101, pp.147-158.
[Impact Factor: 2.45 Q1]
10. Suarez-Tangil, Guillermo; Tapiador, Juan E; Peris-Lopez, Pedro; Blasco, Jorge. 2014. Dendroid: A text mining approach to analyzing and classifying code structures in android malware families Expert Systems with Applications. Pergamon. 41-4, pp.1104-1117.
[Impact Factor: 6.95 Q1]

C.2. Congress

1. "Current and Future Issues of AI and Cyber Security". UK Parliament, All-Party Parliamentary Group on Cyber Security, Invited presentation. March 2021.
2. "Mesh Messaging in Large-scale Protests: Breaking Bridgefy". Rearl World Crypto 2021. With Martin R. Albrecht Jorge Blasco Rikke Bjerg Jensen Lenka Mareková. January 2021.
3. "The Internet of Threats" Information Security Day Luxembourg 2018, Invited Keynote, March 2018.

C.3. Research projects

1. MATM – Mejorando la Atribución de Malware Mediante Técnicas Avanzadas de Machine Learning. Instituto Nacional de Ciberseguridad. Jorge Blasco Alís. 11/01/24-Actualidad. 315.041€. Principal Investigator.
2. Cátedra Ciberseguridad INCIBE-UPM. Instituto Nacional de Ciberseguridad. Jorge Blasco Alís. 11/01/24-Actualidad. 596.507€. Principal Investigator.
3. Security in Bluetooth Enabled Devices BLEMAP. Innovate UK. Jorge Blasco Alís. (Royal Holloway, University of London). 04/2019-02/2020. 53.000 €. Principal Investigator.
4. SEEK - Steganography in Video. Tom Chen. (City, University of London). 03/2016-03/2019. 366.000 €. Investigator.
5. Security in Bluetooth. National Centre for Cyber Security. Jorge Blasco Alís. (Royal Holloway, University of London). 01/2017-04/2017. 10.142 €. Principal Investigator.
6. ACID - Android Collusion Detection. EPSRC. Tom Chen. (City, University of London). 04/2014-04/2017. 299.000 €. Investigator.
7. Wearable Authentication. City, University of London. Jorge Blasco Alís. (City, University of London). 2015-2015. 2.200 €. Principal Investigator.
8. Simulador Avanzado para la Ciberdefensa Organizada SACO. Ministerio de Ciencia e Innovación. Arturo Ribagorda Garnacho. (Universidad Carlos III de Madrid). 02/09/2011-31/12/2014. 145.991 €. Investigator.
9. Metodología para la generación de evasiones en sistemas de detección de intrusiones de red. Universidad Carlos III de Madrid; Comunidad de Madrid. Agustín Orfila Díaz-Pabon. (Universidad Carlos III de Madrid). 01/01/2011-31/12/2011. 1.645 €. Investigator
10. IMAE - Identidad Móvi para la Administración Electrónica. Ministerio de Industria Turismo y Comercio. Agustín Orfila Díaz-Pabon. (Universidad Carlos III de Madrid). 06/05/2010-31/03/2011. 10.700 €. Investigator.

C.4. Contracts, technological or transfer merits

Contracts

1. Deloitte New Entry Graduate Programme. Deloitte UK LTD. Jorge Blasco. 09/2019-06/09/2019. 28.100 €. Co-Lead.
2. Informe pericial para TECNOCOM Telecomunicaciones y Energía SA. TECNOCOM Telecomunicaciones y Energía. Arturo Ribagorda Garnacho. 01/03/2012-11/03/2012. 6.000 €. Participant.
3. Informe Pericial Para Data Control Tecnologías de la Información SA. Data Control Tecnologías de la Información. Arturo Ribagorda Garnacho. 01/07/2010-01/09/2010. 8.500 €. Participant.
4. Auditoria de Seguridad y Optimización del Sistema Informático del Grupo Eurotabaco. Business Intelligence Technology SLL. Arturo Ribagorda Garnacho. 01/08/2009-01/09/2009. 3.500 €. Participant.
5. Seguridad y Confianza en la Sociedad de la Información. Telefónica I+D. 15/12/2007-15/12/2010. 600.617 €. Participant.

Patents

1. Jorge Blasco Alís; Julio Cesar Hernandez Castro. M-002971/2011. Hide It In. España. 06/03/2012. Universidad Carlos III de Madrid.

Spinouts

1. RAVEN SCIENCE LTD. Company Number: 11806761. Established in 2019. Co-Founder with Tom Chen. Exploitation of technology developed as part of SEEK project. Winners of Mayor of London Civic Innovation Challenge. Contracts with London Metropolitan Police.