CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 5 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

CV date	06/06/2024

First name	Helena		
Family name	Rifà Pous		
Gender (*)	Female	Birth date (dd/mm/yyyy)	10/05/1977
Social Security, Passport, ID number	DNI: 77115233M		
e-mail	hrifa@uoc.edu	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0003-0923-0235	

(*) Mandatory

A.1. Current position

Position	Associate Professor (Agregada)
Initial date	01/03/2007
Institution	Universitat Oberta de Catalunya (UOC)
Department/Center	Faculty of Computer Science, Multimedia and Telecommunications
Country	Spain
Teleph. number	933 263 809
Key words	Information Security, Cybersecurity, Privacy, Trust, Distributed networks

A.2. Previous positions (research activity interuptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
01/03/2007-Actual	Professor with two maternity interruptions: 14/07/2014-02/11/2014 and 13/04/2016-02/08/2016
29/08/2000-01/03/2007	Developer at Safelayer Secure Communications, S.A.

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree in Telecommunications Engineering	Universitat Politècnica de Catalunya	2001
PhD in Telematics Engineering	Universitat Politècnica de Catalunya	2008

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*
Main indicators: (1) Six-year research periods: **2 from AQU**, last one in (2013-2018); (2) Five-year awarded teaching periods: **3**, last one in (2016-2020); (3) academic management period (2011-2021): 1; (4) Supervised PhD theses: **4**; (5) Cited by others: **379 (ISI Web of Knowledge)**, 513 (Scopus), 876 (Google Scholar); (6) ISI JCR articles: 22 **(12 in Quartile Q1**, 3 in Q2, 1 in Q3 and 6 in Q4); (7) Indexed articles: **32 in ISI Web of Knowledge,** 38 in Scopus; (8) H index: **11** (Web of Knowledge), 11 (Scopus), 15 (Google Scholar).

Dr. Rifà is an associate professor in the Faculty of Computer Science, Multimedia and Telecommunications at the UOC, where she joined in 2007 after working for seven years as head of research and innovation projects at Safelayer Secure Communications. She obtained her PhD in Telematics Engineering from the Universitat Politècnica de Catalunya (UPC) in 2008. Dr. Rifà's research field is network security and privacy, with a special interest in distributed and wireless networks. It is within these disciplines that the applicant collaborates with the UOC's K-riptography and Information Security for Open Networks (KISON) research

group, which is recognised as a consolidated group by the AGAUR Agency for University and Research Grant Management of the Generalitat de Catalunya. Since 2015 she is the co-PI of the KISON group. The most relevant facts of Dr. Rifà's scientific career are detailed below.

With regard to scientific production, she has published more than 45 scientific publications, of which 22 correspond to articles in journals indexed in the Journal Citation Reports (JCR), 3 in journals not indexed in the JCR, and the rest in conferences, most of which correspond to international conferences included in the ISI proceedings database.

Apart from this, she is the director of the University Master's programme in Cybersecurity and Privacy and was responsible for coordinating its design and the curriculum of its subjects. The master's degree started in September 2011 as the Inter-University Master in Information Technology Security at the UOC, UAB and URV, and was revised in the current programme in September 2019. It has around 300 new students per academic year.

In addition to participating as a lecturer in this Master's Degree, she has also been a lecturer in UOC's bachelor's and master's degrees in the field of ICT Technologies and Law, and the UAB's Master's Degree in Advanced Informatics. She has also directed final master's projects in the research itineraries of these programmes.

The applicant has also supervised three doctoral theses: Amna Qureshi, Victor Garcia Font, Samia Oukemeni and Manesh Thankappan in 2014, 2017, 2019 and 2024 respectively. One of those theses (Dr. Qureshi's) received the extraordinary award as the best thesis of its year in its doctoral program.

Dr. Rifà's research capacity is also demonstrated by having been a PI in several projects financed by the Ministry of Science and Technology, and having participated in other state and European projects. Additionally, the applicant is also reviewer in various JCR-indexed scientific journals, has been member of the program committee of many national and international conferences, and has co-chaired the organizing committee of one international conference and has organized seven national workshops. Currently, Dr. Rifà is editor of three international journals, including, Internet of Things, Security and Communication Networks, IET Information Security. She has been an expert for the European Commission since 2013 in different programs, like FP7, H2020 or Horizon Europe. Regarding dissemination, the applicant has contributed with many articles in newspapers (both online and paper-based), blog entries, and presences in media (radio and TV) regarding cybersecurity in the last fifteen years.

Dr. Rifà did a 7-month postdoctoral research stay at Kingston University London through the José Castillejo Programme of the Ministry of Education (5-month grant), and a BE grant from the Generalidad (2-month grant).

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications (selection of 10 journal papers since 2015)

Iturbe Araya, J.I. & Rifà Pous, H. Anomaly-based cyberattacks detection for smart homes: A systematic literature review. In "Internet of Things", 22, 1-28, 2023. **JCR Impact Factor (2022): 5.9; Q1- Engineering, Electrical & Electronic; Q1 Telecommunications; Q1 Computer Science, Information Systems.**

J. Manuel Marques, **H. Rifà-Pous** and S. Oukemeni. "From false-free to privacy-oriented communitarian microblogging social networks". In "ACM Transactions on Multimedia Computing, Communications, and Applications", 19(2s), 1-23, 2023. **JCR Impact Factor (2022): 5.1; Q1- Computer Science, Software Engineering; Q1 Computer Science, Theory & Methods, Q2 Computer Science, Information Systems.**

M. Thankappan, H. Rifà-Pous, C. Garrigues, "Multi-Channel Man-in-the-Middle attacks against protected Wi-Fi networks: A state of the art review", In "*Expert Systems with Applications*", Vol. 210, 2022, ISSN: 0957-4174. **JCR Impact factor (2022): 8.5; Quartile Q1 – Operations Research & Management (1st decile); Q1 Computer Science, Artificial Intelligence (2nd decile); Q1 – Engineering, Electrical & Electronic (1st decile)**

A. Qureshi, V. Garcia-Font, **H. Rifà-Pous** and D. Megías. "Collaborative and efficient privacy-preserving critical incident management system." *Expert Systems with Applications*", Vol. 163,

Article num. 113727, 2021, ISSN: 0957-4174. **JCR Impact factor (2021): 8.665; Quartile Q1 – Operations Research & Management (<mark>1st decile</mark>); Q1 Computer Science, Artificial Intelligence (2nd decile); Q1 – Engineering, Electrical & Electronic (1st decile)**

S. Oukemeni, **H. Rifa-Pous** and J.M. Marquès Puig. "Privacy analysis on microblogging online social networks: a survey." *ACM Computing Surveys (CSUR), Vol.* 52, Issue 3, pp. 1-36, Jul. 2019, ISSN: 0360-0300. **JCR Impact factor (2019): 7.99; Quartile Q1 – Computer Science, Theory & Methods (<mark>1st decile</mark>)**

A. Qureshi, D. Megías and **H. Rifà-Pous**. "SeVEP: Secure and Verifiable Electronic Polling System", *IEEE Access*, Vol. 7, pages 19266-19290, Feb 2019, ISSN: 2169-3536. **JCR Impact factor (2019): 3.745; Quartile Q1 – Computer Science, Information Systems); Q1– Engineering, Electrical & Electronic, Q2 – Telecommunications**

S. Oukemeni, **H. Rifa-Pous** and J.M. Marquès Puig. "IPAM: Information privacy assessment metric in microblogging online social networks." *IEEE Access,* Vol. 7, p.114817-114836, 2019, ISSN: 2169-3536. **JCR Impact factor (2019): 3.745; Quartile Q1 – Computer Science, Information Systems); Q1– Engineering, Electrical & Electronic, Q2 – Telecommunications**

V. Garcia-Font, C. Garrigues, **H. Rifà-Pous**. "Difficulties and Challenges of Anomaly Detection in Smart Cities: A Laboratory Analysis". Sensors, vol. 18, num. 10, 2018. **JCR Impact factor (2018): 3.031; Quartile Q1- Instruments & Instrumentation**

A. Qureshi, D. Megías and **H. Rifà-Pous**. "PSUM: Peer-to-peer multimedia content distribution using collusion-resistant fingerprinting", *Journal of Network and Computer Applications*, Vol. 66, pages 180-197, May 2016, ISSN: 1084-8045. **JCR impact factor (2016): 3.500; Quartile Q1 – Computer Science, Software Engineering (<mark>1st decile</mark>); Q1 – Computer Science, Interdisciplinary Applications (2nd decile); Q1 – Computer Science, Hardware & Architecture (2nd decile)**

A. Qureshi, D. Megías and **H. Rifà-Pous**. "Framework for Preserving Security and Privacy in Peer-to-Peer Content Distribution Systems", *Expert Systems With Applications*, Vol. 42, Issue 3, pages 1391-1408, Feb 2015, ISSN: 0957-4174. **JCR Impact factor (2015): 2.981; Quartile Q1 – Operations Research & Management (<mark>1st decile</mark>); Q1 Computer Science, Artificial Intelligence (2nd decile); Q1 – Engineering, Electrical & Electronic (2nd decile)**

C.2. Congress (since 2015)

Thankappan, M., **Rifà-Pous, H.**, & Garrigues, C. Multi-channel Man-in-the-Middle Attacks Against Protected Wi-Fi Networks and Their Attack Signatures. In International Conference on Computer, Communication, and Signal Processing (pp. 269-285). Cham: Springer Nature Switzerland, 2023.

A. Qureshi, D. Megías, and **H. Rifà-Pous**. "VSPrep: Verifiable, secure and privacy-preserving remote polling with untrusted computing devices." International Conference on Future Network Systems and Security. Springer, Cham, 2018.

C. Pérez-Solà, Cristina, J. Herrera-Joancomartí, and **H. Rifà-Pous**. "On improving automated self-assessment with Moodle quizzes: Experiences from a Cryptography course." International Conference on Technology Enhanced Assessment. Springer, Cham, 2017.

C.3. Research projects (PI since 2012)

- **Title**: Cátedra internacional ARTEMISA de Ciberseguridad (ARTEMISA: International Chair of Cybersecurity)
  Program: Cátedras de ciberseguridad en España - Plan de recuperación, Transformación y Resiliencia - Next Generation EU
  Project Reference: Cátedra ARTEMISA INCIBE-UPF, y colaboración UOC
  Funding body: Instituto Nacional de Ciberseguridad de España (INCIBE), Ministerio de Asuntos Económicos y Transformación digital
  Period: 11/2023 - 06/2026
  Amount: 393.600€ (UOC)
  PI: <u>Helena Rifà-Pous</u> (PI subproject of UOC), David Megías (co-PI subproject of UOC), Vanesa Daza (UPF, coordinator)

- **Title**: DANGER: Ciberseguridad para la detección, análisis y filtrado de contenidos falsos o maliciosos en entornos de hiperconectividad (DANGER: Cybersecurity for the detection, analysis and filtering of fake or malicious content in hyperconnectivity environments)
  Program: Proyectos estratégicos de ciberseguridad en España - Plan de recuperación, Transformación y Resiliencia - Next Generation EU
  Project Reference: Proyecto DANGER INCIBE-UAB, y colaboración UOC
  Funding body: Instituto Nacional de Ciberseguridad de España (INCIBE), Ministerio de Asuntos Económicos y Transformación digital
  Period: 11/2023 - 12/2025
  Amount: 441.500€ (UOC)
  PI: David Megías (PI subproject of UOC), Helena Rifà-Pous (co-PI subproject of UOC), Jordi Herrara (UPF, coordinator)

- **Title**: Lot 7 6GENABLERS-SEC: Trust, Privacy & Security for 6G (tsi-063000-2021-13): Applied research and development services focused on the study of cyber attacks in advanced 5G or 6G networks
  Project Reference: Lot 7 6GENABLERS-SEC (UNICO I+D)
  Funding Body: i2cat - Tender
  Period: 30/08/2023 - 31/12/2024
  Amount: 154.950,00€
  PI: Helena Rifà-Pous

- **Title**: Lot 5 6GENABLERS-SEC: Trust, Privacy & Security for 6G (tsi-063000-2021-13): Applied research and development services aimed at developing a trust and privacy framework for adaptation in advanced 5G or 6G networks.
  Project Reference: Lot 5 6GENABLERS-SEC (UNICO I+D)
  Funding Body: i2cat - Tender
  Period: 30/08/2023-31/12/2024
  Amount: 60.250,00€
  PI: Helena Rifà-Pous

- **Title**: FREE6G: Cell-Free Networks Based on Machine Learning (ML) for 6G
  Project Reference: CTTC-2022-20037
  Funding body: Centre Tecnològic de Telecomunicacions de Catalunya (CTTC) - Tender
  Period: 01/04/2023-31/12/2024
  Amount: 66.573,54€
  PI: Helena Rifà-Pous

- **Title of the project**: SECURING: Dotando de Ciberseguridad Sostenible a la Internet de las Cosas: Ciberseguridad – Ciberseguridad (Bringing Sustainable Cybersecurity to the Internet of Things Cybersecurity) (SECURING)
  Project Reference: PID2021-125962OB-C31
  Funding body: Ministerio de Ciencia, Innovación y Universidades (Spain)
  Period: 01/09/2022 – 30/08/2025
  PI: David Megías (PI and coordinator) and Helena Rifà Pous (co-PI)
  Amount of funding: € 132.253 (granted to UOC)
  Type of participation: Co-IP

- **Title of the project**: CONSENT: IoT orientado al consumidor conforme con el GDPR/IoT doméstica (GDPR-compliant CONSumer oriENTed IoT (CONSENT): Home IoT)
  Project Reference: RTI2018-095094-B-C22
  Funding body: Ministerio de Ciencia, Innovación y Universidades (Spain)
  Period: 01/01/2019 – 31/12/2021
  PI: David Megías (PI subproject of UOC) and Helena Rifà Pous (co-PI)
  Amount of funding: € 132.253 (granted to UOC)

- **Title of the project**: SmartGlacis: Security and Privacy Technologies for smart cities. Subproject citizen
  Project Reference: TIN2014-57364-C2-2-R
  Funding body: Ministerio de Economía y Competitividad (Spain)
  Period: 01/01/2015 - 31/12/2018
  PI: David Megías (PI subproject of UOC) and Helena Rifà Pous (co-PI)

Amount of funding: € 105.391 (granted to UOC)

C.4. Contracts, technological or transfer merits (PI)

- **Title:** Mentoring in cybersecurity; **Funding body:** I2CAT; **Period:** 01/07/2021- 30/06/2022; **Amount:** € 2.600; **Type of Participation:** Member of the Advisory board

- **Title:** Security audit of e-voting system; **Funding body:** Scytl Secure Electronic Voting, S.A.; **Period:** 06/2021 – 12/2021; **Amount:** € 6.750; **PI:** David Megías and Helena Rifà

- **Title:** Cybersecurity chair UOC-IBM; **Funding body:** IBM, CaixaBank, UOC; **Period:** 06/06/2016-31/12/2017; **Amount:** € 38.801,75; **Type of Participation:** Director of the chair

- **Title:** Industrial doctorate "Seguretat en sistemes *Smart Cities* altament distribuïts i heterogenis"; **Reference:** ECO/2497/2013; **Funding body:** Generalitat de Catalunya; **Period:** 01/02/2014-01/02/2017; **Amount:** € 27.360; **Institution:** CastInfo, S.A.

C.5. Participation in scientific evaluations

- European Commission, Digital expert: Electronic-ID 2022 call
- European Commission, Horizon Europe expert: MSCA-SE 2021, 2022 (vice-chair role), 2023 (vice-chair role) call; MSCA-PF 2021, 2022, 2023 call
- European Commission, INEA-CEF expert: CEF-TC-2017-1-1 call, and CEF-Telecom-2020-1 call
- European Comission, H2020 Expert: Monitoring the implementation of actions under the Horizon 2020 Specific Programme Decision 2013/743/EU and previous research and innovation programmes. Year: 2015; call H2020-DS-2015-1; calls MSCA-IF 2018, 2019, 2020.
- European Commission, FP7 Expert: call FP7-ICT-2013-10 objective 1.2 and the call FP7-ICT-2009-5 objective 3.5
- CHIST-ERA: 2024 call

C.6. Research mobility - grants

- **Title:** Beques per a estades de recerca a l'estranger per a professors i investigadors amb grau de doctor i amb dedicació a temps complet. (BE_DGR modalitat B)
  Funding body: Generalitat de Catalunya
  Period: 01/07/2011-31/08/2011
  Institution: Kingston University London

- **Title:** Programa José Castillejo. Estancias de movilidad para jóvenes doctores
  Funding body: Ministerio de Educación Español
  Period: 01/02/2011-30/06/2011
  Institution: Kingston University London

- **Title:** Resident researcher in the Internet Interdisciplinary Institue (IN3)
  Funding body: Universitat Oberta de Catalunya
  Period: 01/09/2009-31/08/2010
  Institution: IN3 - Universitat Oberta de Catalunya

C.7. Awards

Best paper award A. Qureshi, **H. Rifà-Pous** and D. Megías, "Electronic Payment and Encouraged Cooperation in a Secure and Privacy-preserving P2P Content Distribution System. Seventh International Conference on Advances in Multimedia (MMEDIA 2015).