Part A. PERSONAL INFORMATION

First name	Samer	CV date 01/10/2023
Family name	Hassan Collado	
Gender	Non-binary	
e-mail	samer@fdi.ucm.es	Google Sch - Wikipedia
Open Researcher and Contributor ID (ORCID)		0000-0002-4696-779X

A.1. Current position

Position	**Associate Professor (Profesor Titular de Universidad)**		
Initial date	14/12/2018		
Institution	Universidad Complutense de Madrid (UCM)		
Department/Center	Dpto. Ing. Software e Inteligencia Artificial. Facultad de Informática		
Country	Spain	Teleph. number	913947567
Key words	Blockchain, Online Communities, Artificial Intelligence, Multi-Agent Systems		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
2017-Present	Faculty Associate – Berkman Klein Center – **Harvard University** (USA)
2016-2018	Assoc. Prof. (Profesor Contratado Doctor Int.) – UCM (Spain)
2016	Visiting Prof (2 months) - UCM (Spain)
2015-2017	Fellow – Berkman Klein Center – **Harvard University** (USA)
2011-2016	Assistant Prof. - UCM (Spain)
2010-2011	Lecturer – American Univ. of Science and Technology (Lebanon)
2007-2011	FPU PhD Scholarship – UCM (Spain)
2007-2008	Visiting Researcher – University of Surrey (UK)

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Computer Science	UCM	2010
Master Computer Research	UCM	2007
Eng. Computer Science	UCM	2006
120 ECTS Political Science (simult.)	UNED	2006

Part B. CV SUMMARY

Funding obtained

EU FP7 2013-2016	**577,000€** (UCM)
EU **ERC** 2018-2022	**1,500,000€** (UCM)
National projects	**110,000€** (UCM)

Other indicators

Mobility (research stays)	41 months (30 post-doc)
Additional affiliations	**Harvard** University
Sexenios:	2 (last 2022)
Supervised PhDs:	1 defended + 2 in progress

Publications (Google Scholar)

H-Index	**23**
Total Publications	62
Total citations	1954
Total citations (last 5 years)	1450
Average citation/year, last 5y.	290
JCR	13 (8 Q1/Q2)
CORE	20 (8 A/A*)
Emerging journals (WoS/SJR)	10 (5 high impact)
Interdisciplinary conferences	8 (5 high impact)

Samer Hassan is **Principal Investigator** of the **ERC Starting Grant** of **1.5M€** "P2P Models" (2018-2022), the largest and most prestigious individual research grant of the EU. Since 2019, he is currently the youngest tenured Associate Professor (**Profesor Titular** de Universidad) in the UCM Computer Science faculty, and since 2017 he is **Faculty Associate** at the Berkman Klein Center for Internet & Society **at Harvard University** (USA). From 2015 to 2017, he was a Fellow at this **Harvard** center, a highly competitive appointment with **~5% acceptance rate**. Both years he was the only fellow from Spain and one of the 5 EU fellows. Back in **2013**, he became the **youngest Principal Investigator of an European Project in the history of UCM**, managing a **577.000€** grant for the UCM (FP7 "P2Pvalue", with a total of 2M€). In P2Pvalue, he was the only ICT partner, the partner with the largest budget, and the coordinator of the proposal writing. This project received the maximum qualification by

the European Commission reviews ("Excellent" in 3/3 reviews), with results he coordinated transferred to the prestigious Apache Foundation. He is highlighted in Wikipedia since 2018: https://en.wikipedia.org/wiki/Samer_Hassan and has a Google "highlighted profile" since 2021.
Publications & Invited Presentations. He is an **interdisciplinary** Computer Science researcher with **56 publications** in multiple fields: decentralized systems, multi-agent systems, online communities, agent-based social simulation, computational sociology. He has published in top Computer Science conferences, e.g. ACM CHI, IJCAI and AAMAS. He has an **H-index=23** with 1954 citations (1450 last 5 years). Thus, he has 23 publications with at least 23 citations, and 9 publications with more than 50 citations, showing their high scientific impact. In the last 10 years, 91% of his 32 publications did not include any PhD supervisor, showing leadership on his research. He **pioneered research on blockchain governance**, especially on Decentralized Autonomous Organizations (DAOs), which are currently managing $8 billion. He was selected by the European Commission as lead researcher to coordinate the EU research and policy report on Blockchain for Social Good, and selected to write the definition of DAO (with 204 citations) in the Internet Policy Review glossary. He achieved **ample international recognition**, giving invited presentations in 25+ international venues, 14 with high international relevance (e.g. 5 different research centers at **Harvard**, **MIT**'s Media Lab, or **European Commission**). He was also invited to an European Parliament commission on blockchain, O'Reilly Foo Camp 2021, or EU Blockchain Observatory.

Projects & Scholarships. He has participated in 14 research projects, 4 of them European. He received multiple scholarships, pre-doc (UCM, Mutua Madrileña, Caja de Burgos) and post-doc (Juan de la Cierva, José Castillejo, Real Colegio Complutense de Harvard). He received the award for knowledge transfer 2021 at UCM. His awards and fellowships sum up 167K€.

Mobility & International involvement. He has carried out research stays abroad in USA, UK, Lebanon and Portugal, for a total of **41 months abroad (30 postdoctoral**, including 20m at Harvard). He belongs to the **W3C** Blockchain Community Group (World Wide Web Consortium), the IGF Dynamic Coalition on Network Neutrality (Internet Governance Forum, **United Nations**) and is founding member of the **Association of ERC Grantees** (Brussels). He is co-founder of 4 study groups in **Harvard**'s centers. He has developed multiple international collaborations, with 30+ co-authors, including researchers from University of Surrey, CNRS, Universidade de Lisboa, University of Amsterdam, University College London, University of California, or Harvard University.

Evaluation. He reviewed for the **European Commission** (5 times), **COST** Actions, **Austrian** Science Fund, **Netherlands** Organisation for Scientific Research, **Polish** National Science Center, **Oxford** University Press, 40 Scientific Committees of international conferences, and 8 JCR-indexed journals.

Other Merits (Transfer, Supervision, International Visibility). He performed ample technology transfer (see C.4), including a spin-off enterprise which attracted 300,000€. He has experience supervising 4 PhD students, 8 Master theses, 7 research assistants, 40+ Final Project students, and manages a team of 8 researchers. His mentoring has been fruitful, with one PhD student leading a spin-off, another student elected as OpenSuse Linux board member and in Columbia's grad program, and a junior researcher now in world-class research group Data & Society. His research received **ample media attention**, in the mass media of 6 EU countries and US, e.g. EFE, the Dutch Financial Times, Le Temps, Shareable, 20 Minutos. His last talk in Fundación Ramón Areces gathered 321,000 views.

Part C. RELEVANT MERITS

C.1. Journal Publications (selection)

Peña-Calvin, A., Saldivar, J., Arroyo, J., **Hassan, S.** (2023). A Categorization of Decentralized Autonomous Organizations: The Case of the Aragon Platform. IEEE Transactions on Computational Social Systems. http://doi.org/10.1109/TCSS.2023.3299254
JCR (2022): 5.0 (Q1)

Semenzin, S., Rozas, D., **Hassan, S.** (2022) Blockchain-based application at a governmental level: disruption or illusion? The case of Estonia. Policy and Society, puac014. https://doi.org/10.1093/polsoc/puac014
JCR(2021): 9.3 (Q1) Citations (GSch): 18

Tenorio-Fornés A., Arroyo, J., **Hassan, S**. (2022) Participation in wiki communities: Reconsidering their statistical characterization. PeerJ Computer Science. 8, e792. https://doi.org/10.7717/peerj-cs.792
JCR(2022): 3.8 (Q2) Citations (GSch): 2

Tenorio-Fornés, Á., Tirador, E. P., Sanchez-Ruiz, A. A., **Hassan, S**. (2021). Decentralizing science: Towards an interoperable open peer review ecosystem using blockchain. Information Processing & Management, 58(6), 102724. https://doi.org/10.1016/j.ipm.2021.102724
JCR(2021): 7.466 (Q1) Citations (GSch): **28**

Tenorio-Fornés, Á., **Hassan, S.**, & Pavón, J. (2021). Peer-to-Peer System Design Trade-Offs: A Framework Exploring the Balance between Blockchain and IPFS. *Applied Sciences*, *11*(21), 10012. https://doi.org/10.3390/app112110012
JCR (2021): 2.838 (Q2) Citations (GSch): 9

Rozas, D., Tenorio-Fornés, A., Díaz-Molina, S., & **Hassan, S.** (2021). When Ostrom meets blockchain: exploring the potentials of blockchain for commons governance. SAGE Open, 11(1), 21582440211002526. https://doi.org/10.1177/21582440211002526
JCR (2021): 2.032 (Q2) Citations (GSch): **146**

De Filippi, P., & **Hassan, S.** (2016). Blockchain technology as a regulatory technology: From code is law to law is code. First Monday, 21(12). https://doi.org/10.5210/fm.v21i12.7113
Citations (GSch): **337** Altmetric: 47 (top 5%) ScimagoJR (2016): Q1 (Computer Networks)

Hassan, S.; Arroyo, J.; Galán, J. M.; Antunes, L.; Pavón, J. (2013). Asking the Oracle: Introducing Forecasting Principles into Agent-Based Modelling Journal of Artificial Societies and Social Simulation. 16. ISSN 1460-7425. http://doi.org/10.18564/jasss.2241
JCR (2013): 0.531 (Q3) Citations (GSch): **68**

Hassan, S.; Pavón, J.; Salgado, M. (2011). Friendship Dynamics: Modelling Social Relationships Through a Fuzzy Agent-Based Simulation. Discrete Dynamics in Nature and Society, pp.1-19. ISSN 1026-0226. https://doi.org/10.1155/2011/765640
JCR (2011) = 0.688 (Q2) Citations (GSch): **31**

Fuentes-Fernández, R., Galán, J.M., **Hassan, S.**, Pavón, J., Villafañez F. A. (2011). Metamodelling for Agent-based Modelling: An Application for Posted Pricing Institutions. Journal of Studies in Informatics and Control. 20, pp.55-66. ISSN 1220-1766. https://doi.org/10.24846/v20i1y201105
JCR (2011) = 0.578 (Q3) Citations (GSch): 5

Pavón, J., Arroyo, M., **Hassan, S.**, Sansores, C. (2008). Agent-based modelling and simulation for the analysis of social patterns. Pattern Recognition Letters, 8, 1039-1048. ISSN 0167-8655. https://doi.org/10.1016/j.patrec.2007.06.021
JCR(2008) = 1.559 (Q2) Citations (GSch): **90**

C.2. Conference Publications (selection)

Saldivar, J., Martínez-Vicente, E., Rozas, D., Valiente, M. C., & **Hassan, S.** (2023, April). Blockchain (not) for Everyone: Design Challenges of Blockchain-based Applications. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (pp. 1-8).
CORE: A* SCIE/GGS: A++ Citations (GSch): 1

Arroyo, J., Davó, D., Martínez-Vicente, E., Faqir-Rhazoui, Y., & **Hassan, S.** (2022). DAO-Analyzer: Exploring Activity and Participation in Blockchain Organizations. In Companion Publication of the 2022 Conference on Computer Supported Cooperative Work and Social Computing (pp. 193-196).
CORE: A SCIE/GGS: A+ Citations (GSch): 3

Faqir-Rhazoui, Y., Ariza Garzón, M. J., Arroyo Gallardo, J., & **Hassan, S.** (2021). Effect of the Gas Price Surges on User Activity in the DAOs of the Ethereum Blockchain. Conference on Human Factors in Computing Systems (CHI). Article No.: 407 Pages 1–7 https://doi.org/10.1145/3411763.3451755
CORE: A++ SCIE/GGS: A++ Citations (GSch): 28

Faqir-Rhazoui, Y., Arroyo Gallardo, J., & **Hassan, S.** (2021). A Scalable Voting System: Validation of Holographic Consensus in DAOstack. In Proceedings of the 54nd Hawaii International Conference on System Sciences (HICSS 2021), Hawaii, USA. https://doi.org/10.24251/HICSS.2021.676
CORE: A SCIE/GGS: A+ Citations (GSch): 16

Tenorio-Fornés, A., Jacynycz, V., Llop D., Sánchez-Ruiz, A., **Hassan, S.** (2019). Towards a Decentralized Process for Scientific Publication and Peer Review using Blockchain and IPFS. 52nd

Hawaii International Conference on System Sciences (HICSS 52). 10 pages. http://doi.org/10.24251/HICSS.2019.560
CORE: A SCIE/GGS: A+ Citations (GSch): **64**

Serrano, A., Arroyo, J., & **Hassan, S.** (2018). Webtool for the analysis and visualization of the evolution of wiki online communities. In Proceedings of the 26th European Conference on Information Systems (ECIS). ID 2169. ISBN 978-1-86137-667-1
CORE: A Citations (GSch): 7

Hassan, S., Antunes, L., & Pavón, J. (2009). A data-driven simulation of social values evolution. In Proceedings of The 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS). Volume 2 (pp. 1337-1338).
CORE: A++ Citations (GSch): 22

C.3. Research projects

As Principal Investigator *(first EU, after national):*

1) P2P Models: Decentralized Blockchain-based Organizations for Bootstrapping the Collaborative Economy (#759207). European Research Council (ERC). **ERC** Starting Grant. UCM. 2018-2022. **1.500.000 € for UCM** (the only partner). **PI Samer Hassan**.

2) P2Pvalue: Techno-social platform for sustainable models and value generation in commons-based peer production in the Future Internet (#610961). European Commission. UCM. 2013-2016. 2.454.698€ for the whole project **(577.262€ for UCM). PI Samer Hassan**.

3) DAOapplications: Evaluación de organizaciones autónomas descentralizadas basadas en blockchain para la gestión de proyectos DeFi, NFT y Metaverso (PID2021-127956OB-I00). Ministerio de Ciencia e Innovación. UCM. 2023-2025. 93.412€ for UCM. **PIs Samer Hassan** y Javier Arroyo

4) Chain Community: Analíticas para las comunidades en la blockchain (RTI2018-096820-A-I00). Ministerio de Ciencia. UCM 2019-2021. 18.634€ for UCM. **PIs Samer Hassan** y Javier Arroyo

As member (selection):

1) Platform Work Inclusion Living Lab (OC-2021-1-25232). COST Action. Horizon Europe. 2022-2025. Budget: 200,000€. Chair: Mayo Fuster Morell.

2) Fin-Tech: FINancial supervision and TECHnology compliance training programme (#825215). Comisión Europea. H2020. H2020-ICT-2018-2, (2018-2021). U. of Pavia, (coordinator), UCM, Humboldt University of Berlin… PI at UCM: Javier Arroyo. Budget: 2,500,000€ (UCM:100,000€)

3) ColosAAL: collaborative development of AAL solutions (TIN2014-57028-R). Programa Nacional I+D: Retos. IP: Juan Pavón (UCM). 2015-2017. 117.000 €.

4) SociAAL: A model driven methodology for the development of Ambient Assisted Living (AAL) systems with a social perspective. Ministerio de Ciencia e Innovación. IP: Jorge Jesús Gómez Sanz (UCM). 2012-2015. 47.000 €.

5) Herramientas basadas en agentes para el modelado y simulación de sistemas sociales complejos (SiCoSSys). Ministerio de Ciencia e Innovación. IP: Juan Pavón (UCM). 2009-2011. 108.900 €.

C.4. Contracts, technological or transfer merits

He has co-author or coordinated **multiple free/open source software projects** of applied research, with successful transfer to a diversity of SME. Due to the **unpatentability** of such software within the EU, this is a merit equivalent to patents in this field. These are SwellRT (highlighted in Wikipedia since 2016: https://en.wikipedia.org/wiki/SwellRT) **adopted by the prestigious Apache Foundation**; Teem, adopted by dozens of Collaborative Economy groups; Move Commons, adopted by hundreds of projects since 2010. Details available upon request. Moreover, he has co-coordinated the development of Decentralized Science, first as research line within his ERC project, and later as **spin-off enterprise**. Thus, in 2019 the enterprise Decentralized Academy SL (CIF B88423421) was created, led by his PhD student Ámbar Tenorio Fornés. This enterprise has already **obtained 300,000€ in funding**, from the EU Ledger Accelerator programme and the Grant For The Web programme by Mozilla.