

Curriculum



Nome Name:	Mauro
Cognome Surname:	BARNI

ORCID:	n.d.
Scopus Author ID:	n.d.
WOS Author ID:	n.d.
Sito WEB WEB site:	n.d.

POSIZIONE PROFESSIONALE ATTUALE / CURRENT PROFESSIONAL POSITION:

Posizione attuale Current position:	In servizio
Qualifica Qualification:	Professore Ordinario (L. 240/10)
Ateneo/Ente/Azienda University/Institution/Company:	Università degli Studi di SIENA
Nazione Ateneo/Ente/Azienda University/Institution/Company Country:	ITA
Anno inizio Start Year:	2016
Anno fine End Year:	n.d.

PRECEDENTI ESPERIENZE LAVORATIVE (ULTIMI 10 ANNI) / PREVIOUS WORK EXPERIENCE (LAST 10 YEARS):

Qualifica Qualification:	Professore Ordinario
-----------------------------	----------------------

Ateneo/Ente/Azienda University/Institution/Company	Università degli Studi di SIENA
Posizione Sede Lavorativi (indicare Nazione e Città) Workplace Location (specify Country and City):	Siena, SI, Italia
Anno inizio Start Year:	2016
Anno fine End Year:	2025
Descrizione Description:	

LINGUE / LANGUAGES:

Lingua Language:	Inglese
Scrittura Writing:	C1
Comunicazione Communication:	B2

AREA/SETTORE SCIENTIFICO-DISCIPLINARE / AREA/SECTOR SCIENTIFIC-DISCIPLINARY

Area scientifico-disciplinare Area scientific-disciplinary:	Ingegneria industriale e dell'informazione
Area scientifico-disciplinare codice Area scientific-disciplinary code:	09
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-Telecomunicazioni
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-IINF-03/A

DESCRIZIONE DEI PRINCIPALI RISULTATI SCIENTIFICI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 PUBBLICAZIONI) / DESCRIPTION OF THE MAIN SCIENTIFIC RESULTS ACHIEVED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 PUBLICATIONS):

Descrizione Description:	<i>I have carried out my research activity for more than 25 years, first at the Department of Electronics and Telecommunication of the University of Florence, then at the Department of Information Engineering and Mathematics of the University of Siena. My activity focuses on digital image processing and information security, with particular reference to the application of image processing techniques to copyright protection (digital watermarking) and authentication of</i>
-----------------------------	---

	<p><i>multimedia (multimedia forensics). I have been studying the possibility of processing signals that have been previously encrypted without decrypting them (signal processing in the encrypted domain – s.p.e.d.). Lately I have been working on theoretical and practical aspects of adversarial signal processing, adversarial machine learning and protection of IPR in AI by means of neural network watermarking. I am author/co-author of about 350 papers published in international journals and conference proceedings, I hold four patents in the field of digital watermarking and one patent dealing with anticounterfeiting technology. My papers on digital watermarking have significantly contributed to the development of such a theory in the last decade as it is demonstrated by the large number of citations some of these papers have received. My overall citation record amounts to an h-number of 69 according to Scholar Google search engine. I am co-author of the book “Watermarking Systems Engineering: Enabling Digital Assets Security and other Applications”, published by Dekker Inc. in February 2004. I am editor of the book “Document and Image Compression” published by CRC-Press in 2006. In 2010 I was awarded the IEEE Transactions on Geoscience and Remote Sensing best paper award. I was the recipient of the Individual Technical Achievement Award of EURASIP EURASIP for 2016.</i></p>
--	---

PUBBLICAZIONI / PUBLICATIONS:

<p>Anno della pubblicazione Year of publication:</p>	<p>2024</p>
<p>Citazione Citation:</p>	<p>B. Tondi, A. Costanzo, M. Barni, “Robust and Large-Payload DNN Watermarking via Fixed, Distribution-Optimized, Weights”, IEEE Transactions on Dependable and Secure Computing, 10.1109/TDSC.2024.3426957, July 2024</p>

DESCRIZIONE DEI PRINCIPALI PROGETTI DI RICERCA E PREMI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PRINCIPAL INVESTIGATOR O COORDINATORE LOCALE DI PROGETTI DI RICERCA COMPETITIVI NAZIONALI O INTERNAZIONALI, SIGNIFICATIVI PREMI CONSEGUITI PER LA PROPRIA ATTIVITÀ DI RICERCA)/ DESCRIPTION OF THE MAIN RESEARCH PROJECTS AND AWARDS AWARDED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 ACHIEVEMENTS, INCLUDING, FOR EXAMPLE, PRINCIPAL INVESTIGATOR OR LOCAL COORDINATOR OF NATIONAL OR INTERNATIONAL COMPETITIVE RESEARCH PROJECTS,

SIGNIFICANT AWARDS AWARDED FOR YOUR RESEARCH ACTIVITY):

<p>Descrizione Description:</p>	<p><i>Mauro Barni coordinated several Italian and European projects. The amount of funds gained in the last 5 years is larger than 1MEuro. The most important R&D projects he took part in the last five years include the following: Principal investigator of the research unit of Siena of the project: DISCOVER: A Data- Driven Integrated Approach for Semantic Inconsistencies VerificationMedia Forensics Integrity Analytics, funded by DARPA (Defense Advanced Research Projects Agency - USA), for the years 2020-2024. (about 400.000 USD) Principal, investigator of the project "PREMIER: PREserving Media trustworthiness in the artificial Intelligence ERa", funded by the Italian Ministry of University and Research, for the years 2020-2023. (about 670 KEuro) Principal investigator of the research unit of Siena of the project: "Forensic Overhead Images", finanziato dall'AFRL (Air Force Research Laboratory - USA), per il periodo 2022- 2023. (240.000 USD) Principal Investigator of the project"PRINTOUT: Printed Documents Authentication" funded by the EU in the framework of the H2020-MSCA-IF-2019, call for the period 2020-2021 (183.473,28 Euro) Principal investigator of the research unit of Siena of the project MEDIFOR: Media Forensics Integrity Analytics, funded by DARPA (Defense Advanced Research Projects Agency - USA), for the years 2016-2020. (about 400.000 USD)</i></p>
-------------------------------------	---

<p>Descrizione Description:</p>	<p>Transactions Prize Paper Award (2011) della IEEE Geoscience and Remote Sensing Society 2011, per l'articolo: A. Abrardo, M. Barni, E. Magli, and F. Nencini, "Error-Resilient and Low-Complexity Onboard Lossless Compression of Hyperspectral Images by Means of Distributed Source Coding", TGARS, vol. 48, no. 4, April 2010, pp. 1892-1904.</p>
-------------------------------------	--

<p>Descrizione Description:</p>	<p>Ha ricevuto il premio: Individual Technical Achievement Award dell'EURASIP per il 2016.</p>
-------------------------------------	--

<p>Descrizione Description:</p>	<p>- E' co-autore dell'articolo: S. Milani, M. Fontani, P. Bestagini, M. Barni, A. Piva, M. Tagliasacchi, and S. Tubaro, S. (2012) 'An overview on video forensics', APSIPA Transactions on Signal and Information Processing, che ha vinto il "Sadaoki Furui Prize Paper Award" del 2016, che viene conferito ogni anno a un lavoro pubblicato nei 5 anni precedenti su APSIPA Transactions on Signal and Information Processing (ATSIP).</p>
-------------------------------------	--

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SVILUPPO DI RETI E RELAZIONI SCIENTIFICHE NAZIONALI E INTERNAZIONALI (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI

ESEMPIO, PARTECIPAZIONE O ORGANIZZAZIONE DI CONVEGNI NAZIONALI E INTERNAZIONALI; CONTRIBUTI A CONSORZI DI RICERCA) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF DEVELOPMENT OF NATIONAL AND INTERNATIONAL SCIENTIFIC NETWORKS AND RELATIONS (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, PARTICIPATION OR ORGANIZATION OF NATIONAL AND INTERNATIONAL CONFERENCES; CONTRIBUTIONS TO RESEARCH CONSORTIA):

Descrizione Description:	
-----------------------------	--

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SUPPORTO ALLA COMUNITÀ SCIENTIFICA (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, RESPONSABILITÀ DI DIREZIONE DI COMITATI EDITORIALI; INCARICHI DI VALUTAZIONE DELLA RICERCA PRESSO ISTITUZIONI NAZIONALI O INTERNAZIONALI; RESPONSABILITÀ ISTITUZIONALI ALL'INTERNO DELL'ISTITUZIONE DI APPARTENENZA O DI ALTRE ISTITUZIONI) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF SUPPORT TO THE SCIENTIFIC COMMUNITY (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, MANAGEMENT RESPONSIBILITIES OF EDITORIAL COMMITTEES; RESEARCH EVALUATION ROLES AT NATIONAL OR INTERNATIONAL INSTITUTIONS; INSTITUTIONAL RESPONSIBILITIES WITHIN THE INSTITUTION OF AFFILIATION OR OTHER INSTITUTIONS):

Descrizione Description:	<i>I have been the chairman of the IEEE Multimedia Signal Processing Workshop held in Siena in 2004, and the chairman of the IV edition of the International Workshop on Digital Watermarking. He was the technical program co-chair of ICASSP 2014 and the technical program chairman of the 2005 edition of the Information Hiding Workshop, the VIII edition of the International Workshop on Digital Watermarking and the V edition of the IEEE Workshop on Information Forensics and Security (WIFS 2013). I was the Editor in chief of the IEEE Transactions on Information Forensics and Security from 2015 to 2017. I was the founding editor in chief of the EURASIP Journal on Information Security. I have been a member of the editorial board of several journals including, IEEE Signal Processing Magazine, IEEE Trans. on Circuits and system for Video Technology, IEEE</i>
-----------------------------	--

	<p><i>Transactions on Multimedia, IEEE Signal Processing Letters, IEEE Transactions on Dependable and Secure Computing, IEEE Open Journal on Signal Processing. From 2010 to 2011, I have been the chairman of the IEEE Information Forensic and Security Technical Committee (IFS-TC) of the IEEE Signal Processing Society. I have been a member of the IEEE Multimedia Signal Processing technical committee and of the conference board of the IEEE Signal Processing Society. I am a fellow member of the IEEE, fellow member of AAIA (Asia-Pacific Artificial Intelligence Association) and senior member of EURASIP. I was appointed distinguished lecturer by the IEEE Signal Processing Society for the years 2013-2014. I have been the chairman of the Italian chapter of the IEEE Signal Processing Society from 2018 to 2021.</i></p>
--	--

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI VALORIZZAZIONE DELLE CONOSCENZE (CON ANNESSO ELENCO DI MASSIMO 3 RISULTATI, RELATIVI ALLA PARTECIPAZIONE DEL CANDIDATO ALLE ATTIVITÀ DI VALORIZZAZIONE DELLE CONOSCENZE) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF KNOWLEDGE VALORIZATION (WITH ATTACHED LIST OF MAXIMUM 3 RESULTS, RELATING TO THE CANDIDATE'S PARTICIPATION IN KNOWLEDGE VALORIZATION ACTIVITIES):

Descrizione Description:	
-----------------------------	--

Informazioni aggiornate alla data di candidatura 26-05-2025

Mauro BARNI

Il presente curriculum costituisce allegato e parte integrante dell'incarico sottoscritto