

GIANCARLO MASCETTI, Ph.D.

Curriculum Vitae, Luglio 2022

Riepilogo

Giancarlo Mascetti, ricercatore, diploma in chimica, laurea in scienze biologiche, dottore di ricerca (PhD) in biofisica, IT manager, computer-scientist.

Da Maggio 2021 è membro del Comitato Direttivo del PLSV (Polo Ligure Scienze della Vita) e partecipa alle sessioni territoriali di ALISEI (Cluster Nazionale Scienze della Vita).

Dal 2020 al 2022 ha personalmente adattato, configurato, implementato e reso operative piattaforme prototipali virtualizzate mediante tecnologie DOCKER / DOCKER-COMPOSE / DOCKER-IN-DOCKER partendo da progetti open-source in ambito VIRTUAL RESEARCH ENVIRONMENT (VRE) basati sul molto noto ecosistema JUPYTERHUB (accreditato a livello internazionale) realizzando un FRAMEWORK SCIENTIFICO COMPUTAZIONALE CLOUD-BASED usabile dalle aziende, che gira completamente all'interno del BROWSER, orientato alla prototipazione rapida di POC (Proof Of Concept), APP e DASHBOARD in ambito TT (Trasferimento Tecnologico) e AI (Artificial Intelligence) secondo i principi di INTER-OPERABILITÀ descritti nel PNSA (Piano Nazionale della Scienza Aperta).

Cronologia

Ideatore e co-fondatore nel 1997 di un istituto privato di ricerca e di servizi per il calcolo scientifico (X – Istituto di Calcolo Scientifico / Institute for Scientific Computing s.r.l., Genova - Business Innovation Center) svolgendo attività di consulenza e ricerca scientifica per laboratori universitari e aziende private su temi di medicina, biologia e chimica, acquisito nel 2001 da una società di servizi medicali (http://web.tiscali.it/X_Institute/).

Ha ideato, coordinato e realizzato nell'anno 2000 la prima esperienza ligure di "condivisione" delle immagini mediche di un ospedale pubblico con un gruppo di medici di famiglia.

Dal 2004 ha gestito installazioni in Italia e negli USA (Lincoln, Nebraska) di un sistema di teleradiologia WEB commerciale in strutture sanitarie private.

Ha ideato, coordinato lo sviluppo software di integrazione con un prodotto commerciale e realizzato dal 2007 al 2010 il primo progetto piemontese di una piattaforma prototipale di "condivisione" e visualizzazione 3D in internet di dati clinici e immagini per la medicina nucleare (TAC/PET) tra 3 ospedali pubblici.

Ideatore di una architettura "proof-of-concept" per la stampa su carta delle radiografie e della diagnostica per immagini da abbinare alla consegna postale domiciliare dei referti cartacei.

Nel 2010 ha ideato e iniziato la ricerca e lo sviluppo di soluzioni open-source per la distribuzione in internet delle immagini diagnostiche e la condivisione di dati tra medico e paziente (<https://dicomfly.com>).

Ha collaborato (2011-2013) con il CASPUR (Consorzio per le Applicazioni del Supercalcolo Per Università e Ricerca, Roma) per la progettazione di un sistema cloud di archiviazione di immagini medicali (PACS).

Ideatore e co-fondatore nel **2015** di una STARTUP per "la catalisi e l'innescò" di iniziative di ricerca e lo sviluppo di applicazioni di **MEDICINA COMPUTAZIONALE** alla portata di tutti...

Co-fondatore nel **2017** di Humana Vox SRL una STARTUP INNOVATIVA A VOCAZIONE SOCIALE (SIAVS) per l'assistenza domiciliare supportata da metodologie digitali.

Ha ideato e contribuito a realizzare nell'estate del **2019** una piattaforma web basata su FIWARE con cui dispositivi IoT biometrici (basati su schede arduino) realizzati da studenti di Ingegneria Biomedica (project work accademici) scambiavano dati in internet su canali di comunicazione criptati.

Eletto nel Maggio **2021** membro del Comitato Direttivo del PLSV (Polo Ligure Scienze della Vita) come rappresentante delle PMI / Startup / Micro e Nanoimprese.

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GIANCARLO MASCETTI, Ph.D.

Curriculum Vitae, July 2022

Personal Information

Name Giancarlo Mascetti
Age
Born
Nationality
Languages Italian (Native)
English (spoken=Basic/written=Discrete)
Family (29)
Email

Education

Diploma in Chemistry, 1980, National Technical Institute for Industrial Chemistry, Genoa, Italy

M.Sc. in Biological Sciences, 1988, University of Genoa, Italy

Ph.D. in Biophysics, 1992, University of Genoa, Italy

Employment

2017 – present Chief Technology and Innovation Officer / Co-founder,
Humana Vox S.r.l, via Monte Suello 12/4, 16121 Genova, Italy

2015 – 2019 President / Co-founder,
Medialess Digital Medicine S.r.l.s., via C. Barabino, 15/10, 16129 Genova, Italy

2010 – 2016 IT Manager / System Administrator,
Paramed S.r.l., C.so Perrone, 73R, 16152 Genova, Italy

2001 – 2010 Teleradiology Research Project Manager and Application,
Paramed S.r.l., C.so Perrone, 73R, 16152 Genova, Italy

1997 – 2001 Research Project Manager and Application / Co-founder / C.E.O. (2000 - 2001)
X-Istituto di calcolo Scientifico – Institute for Scientific Computing S.r.l.
via Greto di Cornigliano, 6R, 16152 Genova, Italy

1992 – 1997 Postdoctoral researcher,
Institute of Biophysics - School of Medicine, University of Genoa, Italy

Professional Experience (Digital Medicine)

Co-founder (1997) and CEO (2000-2001) of a private research company for application services in wide scientific and biomedical areas: X-Istituto di Calcolo Scientifico, Institute for Scientific Computing, s.r.l., at Business Innovation Center (BIC Liguria), Genoa. In the late 2001 the company has been acquired and renamed in Paramed Health Services, s.r.l.

In collaboration (2000) with a German company (SOHARD AG, Fuerth, Bavaria), and its commercial product RADIN, he has designed, coordinated and implemented one of the the first regional project (Regione Liguria, Italy) of "sharing" of Radiological medical images from a public hospital (Ospedale Evangelico Internazionale, Genoa), to a group of family doctors.

From 2004 to 2010 he has managed several installations in Italy and in the U.S.A. of a commercial (RADIN/Visage Imaging) web-based teleradiology DICOM (Digital Imaging and Communication in Medicine) PACS (Picture Archiving and Communication System).

From 2007 to 2010 he has designed, coordinated and implemented the first regional project (funded by Regione Piemonte, Italy) for the internet "sharing" of Nuclear Medicine clinical data and images (CT / PET) between three public hospitals at Novara, Cuneo and Alessandria.

He has designed (2010) a "proof-of-concept" internet-based virtual infrastructure for an home mail delivery of medical reports with images printed on paper.

Collaborates (2011) with CASPUR (Consorzio interuniversitario per le Applicazioni del Supercalcolo Per Università e Ricerca, Rome - inter-university Consortium for the Applications of Supercomputing for Universities and Research) for the design and development of a DICOM internet-based national virtual infrastructure for Medialess Digital Medicine / PACS.

Co-founder and President of an innovative startup: Medialess Digital Medicine s.r.l.s. (Genova, 2015)

Co-founder and Innovation Agitator of an innovative startup: Humana Vox s.r.l. (Genova, 2017)

Professional Experience (Science)

He has conducted research activity (1989-1996) in the study of the "cell nucleus" and the "higher orders of chromatin-structure" dealing with differential scanning calorimetry (DSC) and circular dichroism (CD) data analysis and digital microscopy for quantitative image processing and analysis and 3D reconstruction.

Digital microscopy facility image scientist (1992-1994) supporting research activity in the field of "Langmuir-Blodgett thin films" for Consorzio di Ricerca Industriale Avanzata – TechnoBiochip.

Research and computer scientist (1996-2001) in the following fields: chemistry/quantitative biochemistry, 2D/3D quantitative digital microscopy, neurophysiopathology, mammography, otorhinolaryngology.

Research and imaging scientist (2012-2015) in DICOM and PACS open-source Cloud-based / ARM device Fog-based development and "computational containers".

Teaching Experience

He has given seminars and tutorials (1995-1996) about "Tomographic reconstruction and optical microscopy" for students in the course of "Biophysics and Biomedical Technology" (Faculty of Medicine, University of Genoa).

He was named "Teaching Assistant in Biophysics and Biomedical Instrumentation" (University of Genoa, 1996).

He was appointed Adjunct Professor for the course "Biomedical Informatics" at the School of Specialization in Psychiatry (University of Genoa, 1996).

He has given a seminar about coworking added value: "1+1=3, coworking universita' imprese" (University of Genoa, 2015)

Areas of Expertise

Digital Medicine (DICOM, PACS), Digital Microscopy, R&D experience, Computer Systems Administration (UNIX/Linux, Windows, MacOS X), Docker and Virtualization, Cross-platform open-source web-application prototyping software design for the Cloud, Automated Machine Learning.

Skills

Analytical mind, Positive attitude, Perseverance, Management and Technical experience, IT skills, Problem solving, Strategic thinking, Creativity.

GIANCARLO MASCETTI, Ph.D.

List of Publications

- Vergani L., Gavazzo P., **Mascetti G.** et al., "In situ hybridization techniques for the characterization of chromatin higher order structure and gene expression in mammalian cells", Il Nuovo Cimento, Conference. Proceedings., 31,99-105,1991
- Vergani L., Gavazzo P., Facci P., Diaspro A., **Mascetti G.** et al., "Fluorescence cytometry of microtubules and nuclear DNA during cell-cycle and reverse-transformation", J Cell Biochem 50,201-209,1992
- Vergani L., **Mascetti G.** et al., "Effects of fixatives on high order chromatin structure: a calorimetric study", Thermochimica Acta,206,175-179,1992.
- Vergani L., Gavazzo P., **Mascetti G.** et al., "Ethidium bromide intercalation and chromatin structure: A spectropolarimetric analysis", Biochemistry, 33,6578-6585,1994
- Mascetti G.** et al., "Effect of fixatives on calf thymocytes chromatin as analyzed by 3D high-resolution fluorescence microscopy", Cytometry, 23, 110-119,1996
- Carrara S., **Mascetti G.** et al., "Image restoration: an approach using derivative operator", Optik, 10 (3),1996
- Ram M.K., **Mascetti G.** et al., "Optical, structural and fluorescence microscopic studies on reduced form of polyaniline: the leucoemeraldine base", Synthetic Metals, 89,63-69,1997
- Gavazzo P., Vergani L., **Mascetti G.** et al., "Effect of histone acetylation on chromatin structure", J Cell Biochem, 64,466-475,1997
- Vergani L., **Mascetti G.**, et. al., "Ethidium bromide intercalation and chromatin structure: a thermal analysis", Thermochimica Acta, 294,193-204,1997
- Bartolucci S., Guagliardi A., Pedone E., DePascale D., Cannio R., Camardella C., Rossi M, Nicastro G., DeChiara C., Facci P., **Mascetti G.** et al., "Thioredoxin from *Bacillus acidocaldarius*: characterization, high-level expression in *Escherichia Coli* and molecular modelling", Biochem J, 328(Pt 1),277-285,1997
- Morchio R. and **Mascetti G.**, "Simulation of protein evolution: evidence for a non-linear aminoacidic substitution rate", Riv Biol, 90,83-94,1997
- Nicolini C., Carrara S. and **Mascetti G.**, "High-order DNA structure as inferred by optical fluorimetry and scanning calorimetry", Mol Biol Rep, 24,235-246,1997
- Vergani L., **Mascetti G.** et al., "Effects of polyamines on higher-order folding of in situ chromatin", Mol Biol Rep, 25,237-244,1998
- Maccioni E., Vergani L, Dembo A., **Mascetti G.** et al., "X-ray small angle scattering study of chromatin as a function of fiber length", Mol Biol Rep, 25,73-86,1998
- Perfumo C., Scartezzini P., Pierluigi M., Carrara S., Scaraglio T., Fato M., Cali A., Bricarelli F.D. and **Mascetti G.**, "3-Dimensional Reconstruction of Painted Human Interphase Chromosome-21 in DOWN-Syndrome", Cytogenetics and cell genetics, 81(2), p.26,1998

- Schenone A., Carrara S., Mascetti G., "A neural network based method selecting Gabor wavelet filters for the detection of microcalcifications", *Proc.Int.Worksh. on Digital Mammography*, Nijmegen (NL),487-488,1998
- Schenone A., Carrara S., Mascetti G., "A neural network approach to selection of optimal wavelet filter in texture analysis", *Proc.Int. Symp. on Soft Computing* (Soco99), Genova (I),1999
- Ferrillo F., Beekle M., Billard M., Carrara S., Mascetti G., et. al., "A model of sleep regulation in narcolepsy", *Sleep Research Online*, 2(supplement 1),31,1999
- Vergani L., Mascetti G., et al., "Changes of nuclear structure induced by increasing temperatures", *J Biomol Struct Dyn* 2001 Feb;18(4):535-44
- Mascetti G., et al., "Relationship between chromatin condensation compactness and dye uptake for in situ chromatin stained with DAPI", *Cytometry*, 44(2):113-119,2001
- Salami A., Dellepiane M., Mora R., Moresco P. and Mascetti G., "Analisi temporale del nistagmo vestibolare ed ottocinetico", in *"Aspetti diagnostici riabilitativi della patologia vestibolare: stato dell'arte"* a cura di Mora E., XVIII Giornata Italiana di Otoneurologia, Palermo, 31 marzo 2001. p. 93-100, 2001
- Erokhin V., Troitsky V., Erokhina S., Mascetti G., et.al., "In-plane patterning of aggregated nanoparticle layers", *Langmuir*, 18,3185-3190,2002
- Spadiliero B., Vergani L., Mascetti G., et al., "Differential scanning calorimetry and in situ fluorescence microscopy supports a nuclear model for chromatin structure and organization in T. Cruzi", *J Cell Biochem*, 85,798-808,2002
- Bonanno E., Tagliaferro G., Carla' E.C., Montinari M.R., Pagliara P., Mascetti G., et. al., "Synchronized onset of nuclear and cell surface modifications in u937 cells during apoptosis", *Eur J Histochem*, 46(1):61-74,2002
- Salami A., Dellepiane M., Cervoni E. and Mascetti G., "Temporal analysis of the vestibular and optokinetic nystagmus", *Oto-Rhino-Laryngology Proceedings of the XVII World Congress of the International Federation of Oto-Rhino-Laryngological Societies (IFOS)*. 1240,1333-1337,2003



EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Health systems and products
e-Health and Health Technology Assessment

Brussels,
SANCO.D.3 sanco.ddg1.d.3(2013)1612949

Dear Prof. Mascetti,

Subject: Your expression of interest in membership of the Expert Panel on effective ways of investing in health.

Thank you for applying following our Call for expressions of interest in membership in the Expert panel on effective ways of investing in health (2012/C 310/05). The Commission has assessed all eligible applications in accordance with the procedure and criteria of the call.

Although your application satisfied the eligibility requirements, the Commission could not appoint you on this occasion account taken of the need to achieve a balance of expertise within the Panel and, as far as possible, a geographical distribution that reflects the diversity of scientific problems and approaches within the Community.

The names of the scientists selected as members of the Expert Panel may be accessed at: http://ec.europa.eu/health/healthcare/docs/dec_members_expert_panel_2013_en.pdf

Thank you again for the interest shown in this call.

Yours sincerely,

Tapani PIHA
Head of Unit

GIANCARLO MASCETTI, Ph.D.
Curriculum Vitae

“Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003 e dell’art. 13 GDPR”