Search...

Trucco, Manuel

Professor
Professor, **Computing**
https://orcid.org/0000-0002-5055-0794

United Kingdom

1768 Citations **22** h-Index

2004 2024

Research output per year

Personal profile

Teaching

Emanuele (Manuel) Trucco, MSc, PhD, FRSA, FIAPR, is the NRP Chair of Computational Vision in Computing, School of Science and Engineering, at the University of Dundee, an Honorary Clinical Researcher of NHS Tayside and an Adjunct Professor at the Chinese Academy of Sciences. He got his MSc and PhD degrees in Electronic Engineering from
the University of Genova, Italy, in 1984 and 1990 respectively.
He has been active since 1984 in computer vision, and since 2002 in medical image analysis,
publishing more than 250 refereed papers and 2 textbooks, and serving on the organizing or program committee of the major international and UK conferences. Manuel is co-director of VAMPIRE (Vessel Assessment and Measurement Platform for Images of the Retina), an international research initiative led by the

Education/Academic qualification

Doctor of Engineering, University of Genoa
1 Sep 1986 → 30 Jun 1990
Award Date: 30 Jun 1990

Master of Engineering, University of Genoa
1 Sep 1978 → 18 Jun 1984
Award Date: 18 Jun 1984

External positions

Adjunct Professor, Chinese Academy of Sciences
1 Jan 2018 → 31 Dec 2021

Keywords

Q Science (General)

Universities of Dundee and Edinburgh (co-director Dr Tom MacGillivray), member of the UK Biobank Eye and Vision Consortium. VAMPIRE develops software tools for efficient data and image analysis with a focus on multi-modal retinal images. VAMPIRE has been used in UK and international biomarker studies on cardiovascular risk, stroke, dementia, diabetes and complications, cognitive performance, neurodegenerative diseases, and genetics. Industrial collaborators include Canon Medical, OPTOS plc, NIDEK, and Epipole plc; institutional collaborations include the College of Optometrists, the Royal College of Ophthalmologists, and the Royal College of Veterinaries. Recent VAMPIRE projects led or co-led by Manuel includes a £7M NIHR grant Dundee-Chennai on precision medicine for diabetes (PI Prof C Palmer), a £1.1M EPSRC grant on multi-modal biomarkers for vascular dementia (PI E Trucco), the 3M-Euro ITN "REVAMMAD" (PI Prof A Hunter, Lincoln), and PhD studentships sponsored by OPTOS plc, NIDEK Technologies, SINAPSE and Toshiba. [Last updated: 9 Oct 2018]

Explore network further ›

Projects

2013 2024

4 Active

5 Finished

PRecision Medicine for Diabetis Individuals: a Joint Malaysia-UK Effort (PRIME) - (Joint with UMBI)

Doney, A., Lang, C., Mordi, I., Palmer, C., Pearson, E. & Trucco, M.

Medical Research Council

31/12/19 → 30/12/21

Project: Research

MICA: InterdisciPlInary Collaboration for EfficienT and Effective Use of Clinical Images in Big Data Health Care RESearch: PICTURES (Programme Grant) (Joint with Universities of Edinburgh and Abertay)

Doney, A., Jefferson, E., Palmer, C., Steele, D. & Trucco, M.

Medical Research Council

1/08/19 → 31/07/24

Project: Research

CARdiomyopathy in type 2 DIAbetes mellitus (CARDIATEAM) (Joint with the INSERM as lead, CIBER- Network Centre for Biomedical Research, Luxembourg Institute of Health and 17 others)

Doney, A., Houston, G., Lang, C., Mordi, I., Palmer, C., Pearson, E. & Trucco, M.

COMMISSION OF THE EUROPEAN COMMUNITIES

1/03/19 → 29/02/24

Project: Research

Scotland India Diabetes Health Informatics Unit (joint with Madras Diabetes Research Foundation)

Doney, A., McCrimmon, R., Palmer, C., Pearson, E. & Trucco, M.

1/06/17 → 31/03/21

Project: Research

Pilot Study: Deep Learning for Skin Lesions Classifications with Clinical Images

McKenna, S., Trucco, M. & Zhang, J.

1/07/19 → 31/03/20

Project: Research

View all 9 projects ›

Research Output

2004 2020

1768	22	66	40	7	6	9
Citations	h-Index	Article	Conference contribution	Chapter	Paper	More

Association between Hypertension and Retinal Vascular Features in Ultra-Widefield Fundus Imaging

Robertson, G., Fleming, A., Williams, M. C., Trucco, M., Quinn, N. B., Hogg, R. E., McKay, G. J., Kee, F., Young, I., Pellegrini, E., Newby, D. E., van Beek, E. J. R., Peto, T., Dhillon, B., van Hemert, J. & MacGillivray, T. J., Feb 2020, In : Open Heart. 7, 1, p. 1-7 7 p., e001124.

Research output: Contribution to journal › Article

Open Access File

22 Downloads (Pure)

Retinal Vessels | Arterioles | Venules | Hypertension | Eye

Retinal Vessel Analysis as a Novel Screening Tool to Identify Childhood Acute Lymphoblastic Leukemia Survivors at Risk of Cardiovascular Disease

Azanan, M. S., Chandrasekaran, S., Rosli, E. S., Chua, L. L., Oh, L., Chin, T. F., Yap, T. Y., Rajagopal, R., Rajasuriar, R., MacGillivray, T., Trucco, E., Ramli, N., Kamalden, T. A. & Ariffin, H., 28 Feb 2020, In : Journal of Pediatric Hematology/Oncology.

Research output: Contribution to journal › Article

Retinal Vessels | Precursor Cell Lymphoblastic Leukemia-Lymphoma | Cardiovascular Diseases | Vascular Cell Adhesion Molecule-1 | Vascular Stiffness

Retinal Vessel Phenotype In Patients With Primary Open-Angle Glaucoma

Chiquet, C., Gavard, O., MacGillivray, T. J., Bron, A. M., Semecas, R., Arnould, L., Trucco, M. & Aptel, F., Feb 2020, In : Acta Ophthalmologica. 98, 1, p. e88-e93 6 p.

Research output: Contribution to journal › Article

Retinal Vessels | Retinal Artery | Open Angle Glaucoma | Fractals | Retinal Vein

A multimodal approach to cardiovascular risk stratification in patients with type 2 diabetes incorporating retinal, genomic and clinical features

Fetit, A., Doney, A., Hogg, S., Wang, R., MacGillivray, T., Wardlaw, J. M., Doubal, F. N., McKay, G. J., McKenna, S. & Trucco, E., 5 Mar 2019, In : Scientific Reports. 9, 1, p. 1-10 10 p., 3591.

Research output: Contribution to journal › Article

Open Access File

Single Nucleotide Polymorphism | Type 2 Diabetes Mellitus | Biomarkers | Blood Pressure | Risk Assessment

96 Downloads (Pure)

3

An Image Processing System for Char Combustion Reactivity Characterisation

Chaves, D., Trucco, E., Barraza, J. & Trujillo, M. P., Apr 2019, In : Computers in Industry. 106, p. 60-70 11 p.

Research output: Contribution to journal › Article

Characterization (materials science) | Image processing | Coal | Petrology | Coal combustion

1 Citation (Scopus)

View all 128 research outputs ›

Activities

2010 — 2020

9	5	5	3	3
Invited talk	Participation in conference	Participation in workshop, seminar, course	Public engagement and outreach - public lecture/debate/seminar	More

16th European Conference on Computer Vision

Manuel Trucco (Member)
31 Aug 2020 → 5 Sep 2020

Activity: Participating in or organising an event types › Participation in conference

The transformative potential of data and image analysis for eye care

Manuel Trucco (Participant)
22 Apr 2018 → 23 Apr 2018

Activity: Participating in or organising an event types › Participation in workshop, seminar, course

21st MICCAI: Medical Image Computing and Computer-Assisted Intervention (Event)

Manuel Trucco (Member)
16 Sep 2018 → 20 Sep 2018
Activity: Publication peer-review and editorial work types › Publication peer-review

University of Edinburgh (External organisation)

Manuel Trucco (Member)
2018 → 2020
Activity: Membership types › Membership of group

An introduction to computer vision

Manuel Trucco (Speaker)
30 Jul 2018 → 3 Aug 2018
Activity: Talk or presentation types › Invited talk

View all 25 activities ›

Thesis

Computer-assisted colour fundus image analysis

Author: Chin, K. S., 2011
Supervisor: Trucco, E. (Supervisor)
Student thesis: Master's Thesis › Master of Philosophy
File

Markerless multiple-view human motion analysis using swarm optimisation and subspace learning

Author: John, V., 2011
Supervisor: Trucco, E. (Supervisor)
Student thesis: Doctoral Thesis › Doctor of Philosophy
File

Morphometric measurements of the retinal vasculature in ultra-wide scanning laser ophthalmoscopy as biomarkers for cardiovascular disease

Author: Pellegrini, E., 2016

Supervisor: Trucco, E. (Supervisor) & Houston, J. (Supervisor)

Student thesis: Doctoral Thesis › Doctor of Philosophy

Visual feature learning with application to medical image classification

Author: Manivannan, S., 2015

Supervisor: Trucco, E. (Supervisor)

Student thesis: Doctoral Thesis › Doctor of Philosophy

File