Franc Solina
Curriculum Vitae

University of Ljubljana
Faculty of Computer and Information Science
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Education:

1987	University of Pennsylvania, Philadelphia, Pennsylvania, USA Ph.D. in Computer and Information Science
1982	University of Ljubljana, M.S. in Electrical Engineering
1979	University of Ljubljana, Dipl. Ing. degree in EE

Experience:

1998 –	**Professor**, Faculty of computer and information science, University of Ljubljana.
1991 –	**Head of Computer Vision Laboratory**, Faculty of computer and information science, University of Ljubljana.
2012 –	**Professor**, Academy of Fine Arts and Design, University of Ljubljana, Dept. of Video and New Media.
2011 –	**Quality Assurance Auditor in Higher Education**, Agency for Science and Higher Education, Republic of Croatia.
2010 – 2014	**Member of the Board of Governers, Institut "Jožef Stefan"**, nominated by the Government of Slovenia.
2010 – 2011	**Member of the Strategic Council on Information Society** to the President of the Government of Slovenia.
2006 – 2010	**Dean**, Faculty of computer and information science, University of Ljubljana.
2000 – 2006	**National coordinator for computer and information science**, Ministry of science and technology.
1996 – 1999	**Vice dean for research**, Faculty of computer and information science, University of Ljubljana.
1988 – 1998	**Assistant and Associate professor**, Faculty of computer and information science, University of Ljubljana.
1983 – 1988	**Ph.D. student, Teaching and research assistant, Post-doc**, GRASP Laboratory, SEAS, University of Pennsylvania.

Awards:

Boris Kidrič Fund Award for Scientific Achievements, 1982
Fulbright Fellowship, 1983
Morris and Dorothy Rubinoff Award, CIS, UPenn, 1988
Fellow of the International Association of Pattern Recognition (IAPR), 2002
University of Ljubljana Golden Plaque, 2006
Information Society Lifetime Achievement Award, 2012
Highly Commended Award, Journal of Information, Communication and Ethics in Society, 2016

Membership:

IEEE, IAPR, ICOMOS,
Association of Fine Artists Ljubljana Slovenia,
European Academy of Sciences and Arts, Salzburg

Selected publications

Geometrical modeling of images

[1] Franc Solina and Ruzena Bajcsy. Recovery of parametric models from range images: The case for superquadrics with global deformations. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 12(2):131–147, 1990.

[2] Aleš Jaklič and Franc Solina. Moments of superellipsoids and their application to range image registration. *IEEE Transactions on Systems, Man, and Cybernetics, Part B, Cybern.*, 33(4):648–657, 2003.

[3] Aleš Jaklič, Aleš Leonardis, and Franc Solina. *Segmentation and Recovery of Superquadrics.* Springer, 2010.

[4] Peter Peer and Franc Solina. Panoramic depth imaging: Single standard camera approach. *International Journal of Computer Vision*, 47(1/2/3):149–160, 2002.

[5] Jaka Krivic and Franc Solina. Part-level object recognition using superquadrics. *Computer Vision and Image Understanding*, 95(1):105–126, 2004.

User interfaces

[6] Bor Prihavec and Franc Solina. User interface for video observation over the Internet. *Journal of Network and Computer Applications*, 21:219–237, 1998.

[7] Robert Ravnik and Franc Solina. Audience measurement of digital signage: quantitative study in real-world environment using computer vision. *Interacting with Computers*, 25(3):218–228, 2013.

[8] Robert Ravnik, Borut Batagelj, Bojan Kverh, and Franc Solina. Dynamic anamorphosis as a special, computer-generated user interface. *Interacting with Computers*, 26(1):63–74, 2014.

[9] Aleš Jaklič, Franc Solina and Luka Šajn. User interface for a better eye contact in videoconferencing. *Displays*, 46:25–36, 2017.

Color information

[10] Jure Kovač, Peter Peer, Franc Solina. Human skin color clustering for face detection. *Proceedings of EUROCON 2003—Computer as a Tool.* Vol. 2, pp. 144–148, IEEE, Region 8, 2003.

[11] Peter Ciuha, Bojan Klemenc, and Franc Solina. *Visualization of concurrent tones in music with colours.* Proceedings of the 18th ACM international conference on Multimedia, pp. 1677–1680, 2010.

[12] Matic Potočnik, Bojan Klemenc, Franc Solina, and Uroš Herlec. Computer aided method for colour calibration and analysis of digital rock photographs. *Geologija*, 58(2):247–260, 2015.

Aerospace applications

[13] Marko Hrastovec and Franc Solina. Obtaining meteorological data from aircraft with Mode-S radars. *IEEE Magazine on aerospace and electronic systems*, 28(12):12–24, 2013.

[14] Marko Hrastovec and Franc Solina. Prediction of aircraft performances based on data collected by air traffic control centers. *Transportation Research Part C*, 73:167–182, 2016.

3D documentation in archeology

[15] Miran Erič, Rok Kovačič, Gregor Berginc, Mitja Pugelj, Žiga Stopinšek and Franc Solina. The Impact of the Latest 3D Technologies on the Documentation of Underwater Heritage Sites. In *Proceedings 2013 Digital Heritage International Congress, Marseille, France*, pp. 281–288, 2013.

[16] Miran Erič, Andrej Gaspari, Katarina Čufar, Franc Solina and Tomaž Verbič. Zgodnjerimska ladja iz Ljubljanice pri Sinji Gorici= Early Roman barge from the Ljubljanica River at Sinja Gorica. *Arheološki vestnik*, 65:187–254, 2014.

[17] Aleš Jaklič, Miran Erič, Igor Mihajlović, Žiga Stopinšek and Franc Solina. Volumetric models from 3D point clouds: The case study of sarcophagi cargo from a 2nd/3rd century AD Roman shipwreck near Sutivan on island Brač, Croatia. *Journal of Archaeological Science*, 62 (October):14–152, 2015.

Fine art related research

[18] Franc Solina. 15 seconds of fame. *Leonardo*, 37(2):105-110, 2004.

[19] Franc Solina. New media art projects, panoramic images and live video as interface between real and virtual worlds. *DESIDOC Journal of Library & Information Technology*, 34 (2):110–124, 2014.

[20] Erika Pavlin, Žiga Elsner, Tadej Jagodnik, Borut Batagelj and Franc Solina. From illustrations to an interactive art installation. *Journal of Information, Communication and Ethics in Society*, 13(2):130–145, 2015.

[21] Franc Solina and Blaž Meden. Light fountain—a virtually enhanced stone sculpture. *Digital Creativity*, 28(2):89–102, 2017.

[22] Borut Batagelj and Franc Solina. Preservation of an interactive computer-based art installation—a case study. *International Journal of Arts and Technology*, 10(3):206–230, 2017.