

Computer Graphics

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British Library Cataloguing in Publication Data

Computer graphics 82.
1. Computer graphics—Congresses
001.64'43 T385

ISBN 0-903796-92-9

BSDCS7

© Online 1982

ISBN 0-903796-92-9

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Published by Online Publications Limited, Northwood, UK.

Preface

This book comprises written papers relating to presentations given at the Online Conference "Computer Graphics '82" - London, October 1982.



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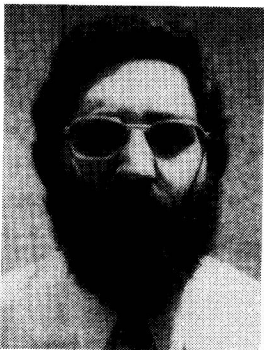
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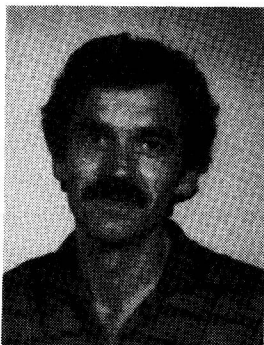
John Aston joined BBC Television in 1965 after spending four years in publishing. In 1969 he was appointed Senior Graphics Designer to head the newly formed design team for Open University Publications. A short period in BBC's Manchester studios preceded his present appointment in 1975 where he is responsible for nearly one hundred design staff and involved in the development of electronic graphic resources.



Norman Badler leads a research team at the University of Pennsylvania operating in advanced concepts of computer animation and three dimensional object representation. He is best known for his work on the representation of human movement. Dr. Badler is presently Vice-Chairman of SIGGRAPH. He is a Senior Editor of 'Computer Graphics and Image Processing' and an Associate Editor of 'IEEE Computer Graphics & Applications'



Jerry Borrell is now Editor-in-Chief of Digital Design, having previously spent a short period with Computer Graphics World. Until 1981 he was with the Congressional Research Service of the Library of Congress in Washington D.C. His areas of specialisation are in information technology - online retrieval, computer graphics, videotex, micrographics, home computing and communications. He has previously held posts in Hawaii, Nigeria, and Miami, and is the author of a considerable number of publications.



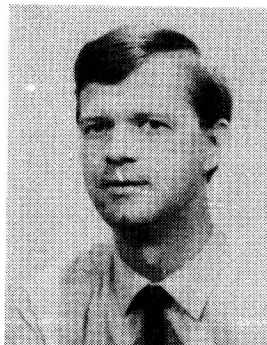
Rene Caubet is a Professor at the University Paul Sabatier in Toulouse and is a member of the French Committee MICAD '82. His current research interests include core graphic software, computer aided design and computer aided teaching.



Suzette Colson has a background in both design and science and has recently completed a Master's Degree in design research at the Royal College of Art. For the past 2 years she has investigated computer applications for the media industries and a major part of her work included design and production of two computer assisted animations. She is currently working as a freelance design consultant for companies engaged in the use of computer graphics.



Ken Davies is Director, Technical Applications of Counting House Computer Systems. Since 1968 he has specialised in CAM with particular reference to NC manufacture. He was responsible for the earliest developments of the GNC software system at the CAD Centre, Cambridge and since 1976 has been involved in the commercial development, installation and support of GNC systems throughout the UK and Europe.



Henk de Groot has been the European Product Manager since 1979 for Tektronix's range of plotters, copiers and imaging product lines as used in graphics applications. He previously held various positions within Tektronix in graphic systems sales, system analysis and CAD/CAM systems marketing, having originally joined the company in 1974.



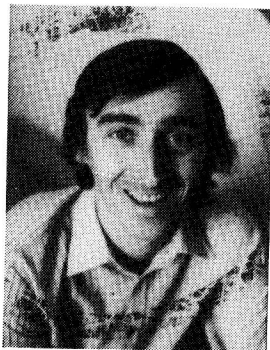
Ivor Faux is currently Corporate Technical Operations Manager for Computer Aided Manufacturing International which organizes collaborative contract work on behalf of its member companies. He was previously Senior Lecturer in CAD/CAM at Cranfield Institute of Technology, with a principal interest in geometric modelling. His industrial experience is in the application of process instrumentation and prototype instrument design.



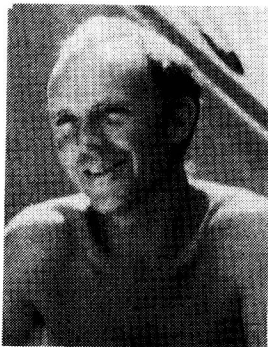
Edward Fiddy joined the O.R. unit of GKN on leaving Cambridge University and eventually became head of Management Services. After a period in British Steel, Dr Fiddy joined British Leyland in 1973 to initiate an O.R. function. Recently he has left BL to form Insight International, a company specialising in visual interactive modelling software.



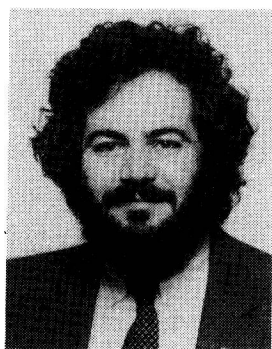
John Frazer trained as an architect at the Architectural Association. He trained at Cambridge University School of Architecture, was Director of Studies at Trinity College and a tutor at the Architectural Association. He is currently Director of Studies and Head of the School of Art and Design Research, History & Criticism at Ulster Polytechnic. He is a partner in Autographics.



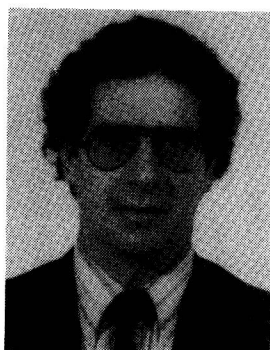
Bill Gardner is senior systems analyst in the BBC Computer Graphic Workshop at the BBC TV Centre, London. He joined BBC TV in 1980 from Strathclyde University where he worked for three years as a Research Fellow in Man-Machine interaction in computer aided design



Ken Garland has been in practice as Ken Garland & Associates, Designers since 1962 having been a visiting lecturer in graphic design at Central School, University of Reading and the RCA. He has been a member of two Graphic Design Boards and is an author of two specialist books on graphics.



David Geshwind is President of Digital Video Systems, Inc. a firm consulting in the medical, video and computer fields and providing design and production services in the area of computer graphics and animation. For 3 years he held a position as Senior Scientist at the Computer Graphics Laboratory of the New York Institute of Technology. There he produced numerous commercial projects including the NOVA Opening. Mr Geshwind has lectured extensively on Computer Animation and is currently teaching a course in 'Computer Graphics Literacy' at the Fashion Institute of Technology.



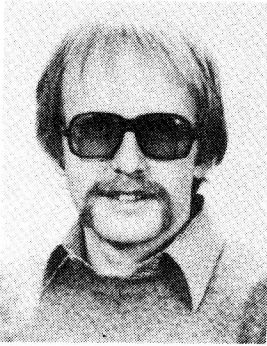
Stephen Johnson as a Director of Perceptronics Washington D.C. Operations, guides the development of prototype systems involving integration of new technologies and basic research. He serves as the Principal Investigator of many projects in the areas of microcomputer based Group Decision Aids which utilize color graphics display, Computer Aided Instructional systems to perform electronic troubleshooting that incorporates AI techniques and micro-computer training systems that apply intelligent optical video disc technology.



John Lansdown is a principal in the firms of Turner Lansdown Holt & Paterson and System Simulation Ltd. Since 1964 he has specialised in the use of computers in architecture and has served on a number of government committees to further development in that subject. He is secretary of the Computer Arts Society and has written many computer programs on micros for such diverse subjects as architectural design, film animation and choreography. He was awarded a RIBA Conference Fund Fellowship in 1980 to study the impact of expert systems on the construction industry.



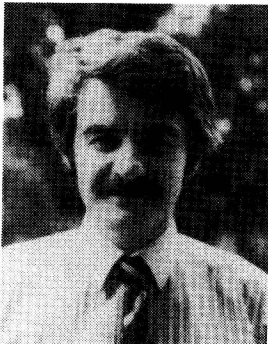
Arthur Llewelyn OBE was involved in early radar and electronic developments, and was later responsible for advanced engineering projects involving computer systems and networks in the UK, USA and Europe. Appointed Director of the CAD Centre, Cambridge (1969-1978), he pioneered development of CAD/CAM systems through co-operative projects with industry. Recognised internationally as a CAD/CAM expert he has carried out studies for the EEC and is now an independent consultant and is Chairman of the CAD/CAM Association.



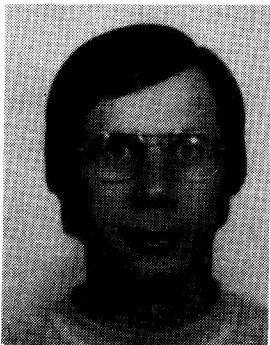
Chris Long is Manager of Computing Services at Independent Television News. He is actively involved in their continuing developments to use computer graphics for daily news bulletins, and programmes covering special events. He formerly worked at BBC Television where he was responsible for computer graphics and political analysis systems used in current affairs programmes. He holds an M.Sc. in Operational Research and Statistics.



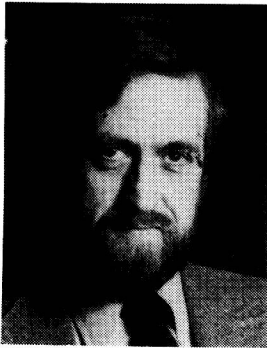
Carl Machover is an internationally recognised computer graphics consultant whose list of clients include American Can, Boeing, Borg Warner, Calcomp, Ford, Hewlett Packard, IBM, Polaroid, Sanders, Summagraphics, Tektronix and Xerox. He is on the Board of Directors of CDVS and Panelvision and on the Editorial Boards of several leading technical journals.



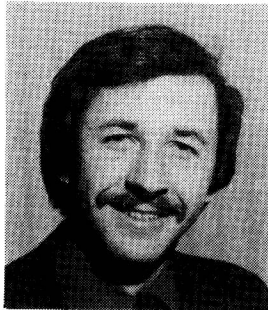
George Mallen is the founder and managing director of System Simulation Ltd. Trained as a scientist, his major interest is the development of appropriate information technology to support senior level planning and decision making. Apart from his work at SSL, he is head of the Computing Activities Unit in the Royal College of Art's Department of Design Research. He has published work on learning, decision making, design research, computer art and organisational modelling.



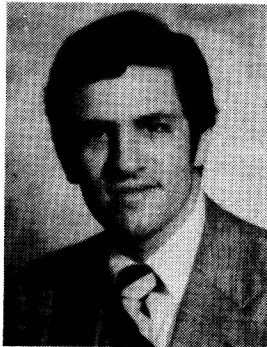
Angus Mitchell has recently assumed the role of Sales Programme Manager at Tektronix Europe in Amsterdam. He worked with Tektronix UK from 1979 until mid 1982, providing technical support on a wide range of graphics products. He specialised on the new range of distributed intelligence graphics terminals and their applications. Prior to this he worked for Computer Technology Limited on minicomputer systems and for the Civil Aviation Authority on automated air traffic control systems.



Richard Newell is a director of Cambridge Interactive Systems. Prior to joining CIS he headed the applications group at the CAD Centre and was involved in a number of major developments including project management of PDMS from its inception through to the first system sale four years later. At CIS he is primarily concerned with design and implementation of state of the art CAD/CAM systems, particularly the development of drafting systems, geometric modelling systems and the interfaces between these and other corporate data processing.



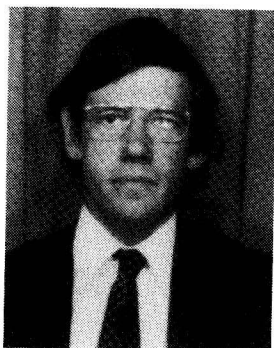
Alan Norman first became involved in the use of slides for the presentation of business information in 1977. Formerly a marketing executive with De La Rue Limited and a marketing manager within the Taylor Woodrow Group. He joined Myriad Audio Visual as Marketing Director in June 1981 after a brief period of association as a consultant and since then has been actively involved in the promotion of computer slide preparation systems.



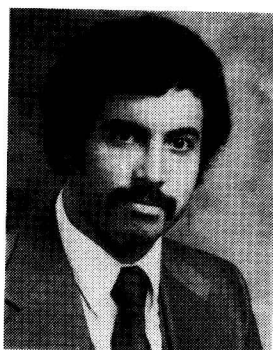
Alan Paller is President of AUI Data Graphics, one of the largest independent suppliers of computer graphics software and services in the USA. A professional engineer, Mr Paller is also a computer systems designer and consultant assisting corporations in developing plans for acquisition of business graphics systems by identifying high pay off applications, defining graphics software/hardware requirements and overseeing successful implementation. He is director of Training & Education for the National Computer Graphics Association in the USA



Eric Parsloe is Managing Director of EPIC Limited. Over the past ten years he has established a reputation as a leading authority on industrial relations and industrial communications. The use of graphics in video, videodisc and business communications programmes is an important aspect of EPIC's work. Mr Parsloe is a published author, having written many articles in the press and business journals. He has also lectured widely and run seminars for industrial and professional bodies in several countries.



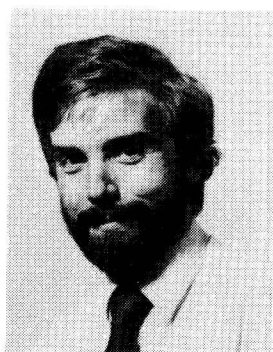
David Probert has been Head of the Strategic Modelling Group within British Telecom's Long Range and Strategic Studies Division, Cambridge since 1979. As well as developing new strategic models and undertaking research into the man-machine interface, his group is responsible for utilising such computer packages in conducting a wide variety of corporate policy studies. From 1976-78, he was engaged by BT as a consultant to develop a dynamic corporate model of the British Telecoms Business, with a planning horizon of 20 - 30 years. Following this and prior to his present post he was employed by BT as Head of Statistical Forecasting Techniques.



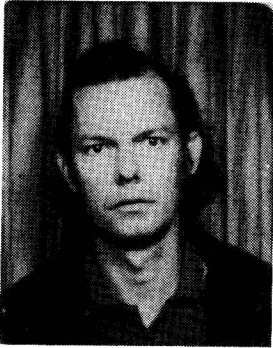
John Squilla has been with Eastman Kodak Company for 8 years and has worked in various divisions including Photochemicals and Plastic & Metal Products and also was in charge of the Analytical Mathematics Activities in the Electrophotographic Technology Division. Mr Squilla has been active in professional organizations for many years. He is presently involved in the investigation and development of new technologies aimed specifically at enhancing and optimizing communications between man and the computer.



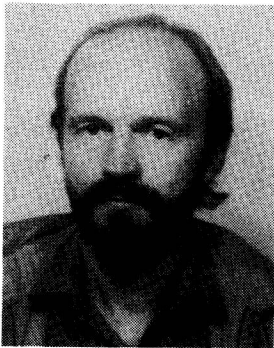
James Swift is a graduate of the Department of Mechanical Engineering at the University of Leeds. His current responsibilities include the management and development of on-line and interactive computing facilities for engineering and joint-management of the Geometric Modelling Project at the University of Leeds.



Tim Taylor graduated from the University of Leeds in July 1980 with a degree in Civil Engineering. In the spring of 1981 he joined Techex Limited in Bournemouth as a programmer. Now at the age of 23 he is working on software for new equipment both in the field of computer graphics and image processing.



Daniel Thalmann is Professor and chairman of the graphics applications laboratory at the University of Montreal. He received his MSc and PhD degrees in Computer Science at the University of Geneva and has published more than 20 scientific papers on computer graphics and programming languages.



Stuart Wooler originally trained in philosophy but gradually shifted his interests to aspects of psychology, culminating in his joining the Decision Analysis Unit, Brunel University as a Research Fellow in 1977. He moved, along with the other members of the Decision Analysis Unit to the London School of Economics in October 1982. He is a member of a team of decision analysts carrying out consultancy for various commercial, industrial and governmental organisations, has published several articles on decision making and lectured on various management programmes.

Ahmed Abbas is Manager - Systems & Services, Whesoe Technical and Computing Systems which provides CAD/CAM systems for the process plant industry. He is responsible for development and delivery of systems. Until recently he was Reader in Computer Aided Design at Teesside Polytechnic, coordinating research projects and implementing training courses in CAD/CAM and is the author of several papers in this field.

Michael R Prince is Head of Technical Services at Atkins Research & Development which provides in-house support to design departments in W S Atkins & Partners, resolving engineering problems and evaluating and implementing computer applications. Earlier, from 1966 to 1972 he was a lecturer in the Civil Engineering Department at Birmingham University.

Peter Wilson is leader of the Engineering Computing Group at the Lucas Research Centre where he has been responsible for the development of a large finite element analysis system. His current interests are in the areas of sculptured surface and solid modelling and he is currently European Chairman of the CAM-I Modelling Project.

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