

## Table of Contents

<b>PREFACE</b>	V
<b>INTRODUCTION</b>	1
<b>Franz Leberl</b> <i>The Promise of Softcopy Photogrammetry</i> .....	3
<b>DESIGN ASPECTS OF DIGITAL PHOTOGAMMETRIC SYSTEMS</b>	15
<b>Jörg Albertz, Gerd König</b> <i>The Advanced Digital Stereophotogrammetric System of the TU Berlin</i> .....	17
<b>Ian Dowman</b> <i>Design of Digital Photogrammetric Workstations</i> .....	28
<b>Gottfried Konecny, Bernd Pollak, Eckard Siebe, Gustav Picht</b> <i>Development of a Digital Photogrammetric Workstation for the MOMS-02/D2 Project</i> .....	39
<b>ALGORITHMIC ASPECTS OF DIGITAL PHOTOGAMMETRIC SYSTEMS</b>	41
<b>Fritz Ackermann, Michael Hahn</b> <i>Image Pyramids for Digital Photogrammetry</i> .....	43
<b>Hans-Peter Bähr, Joachim Wiesel</b> <i>Cost-Benefit Analysis of Digital Orthophoto Technology</i> .....	59
<b>Eberhard Gülich</b> <i>Automatic Extraction of Geometric Features from Digital Imagery</i> .....	74

---

<b>Christian Heipke, Wolfgang Kornus</b> <i>Nonsemantic Photogrammetric Processing of Digital Imagery</i> - <i>The Example of SPOT Stereo Scenes</i> .....	86
<b>David M. McKeown, Jr.</b> <i>Information Fusion in Cartographic Feature Extraction</i> from <i>Aerial Imagery</i> .....	103
<b>Lynn H. Quam, Thomas M. Strat</b> <i>SRI Image Understanding Research in Cartographic</i> <i>Feature Extraction</i> .....	111
<b>Toni Schenk, Charles Toth</b> <i>Knowledge-Based Systems for Digital</i> <i>Photogrammetric Workstations</i> .....	123
<b>Manfred Weisensee, Bernhard Wrobel</b> <i>State-of-the-Art of Digital Image Matching</i> for <i>Object Reconstruction</i> .....	135
 <b>OPERATIONAL SYSTEMS —</b> <b>A VENDOR'S POINT OF VIEW</b>	
<b>Louis Cogan, Thomas Luhmann, A. Stewart Walker</b> <i>Digital Photogrammetry at Leica, Aarau</i> .....	153
<b>Claudy Cruette</b> <i>Design and Development of the MATRA TRASTER T10</i> .....	167
<b>Alexander Gerhard</b> <i>Digital Orthoprojection: Scanning, Handling and Processing</i> of <i>Aerial Images</i> .....	177
<b>Dick Kaiser</b> <i>ImageStation: Intergraph's Digital Photogrammetric Workstation</i> .....	188
<b>Kurt Menke</b> <i>The PhotoScan and Related Products from Carl Zeiss</i> .....	198
<b>Erich Miedlig, Wilfried Wester-Ebbinghaus</b> <i>Digital Photogrammetric Systems from Rollei</i> .....	201

---

<b>OPERATIONAL SYSTEMS — A USER'S POINT OF VIEW</b>	215
<b>Ismael Colomina, Jose Navarro, Margarita Torre</b>	
<i>Digital Photogrammetric Systems at the I.C.C.</i>	217
<b>Atef A. Elsassal</b>	
<i>Future Role of Digital Photogrammetric Workstations at the National Ocean Service, NOAA</i>	229
<b>Paul Newby</b>	
<i>Digital Photogrammetry at the Ordnance Survey</i>	234
<b>RELATIONS TO GEO-INFORMATION SYSTEMS</b>	245
<b>Dieter Fritsch</b>	
<i>Integration of Image Data in Geographic Information Systems</i>	247
<b>Martien Molenaar</b>	
<i>Formal Data Structures, Object Dynamics and Consistency Rules</i>	262
<b>Tapani Sarjakoski, Jussi Lammi</b>	
<i>Stereo Workstations and Digital Imagery in Urban GIS-Environment</i>	274
<b>RELATIONS TO REMOTE SENSING, COMPUTER GRAPHICS AND MACHINE VISION</b>	289
<b>Manfred Ehlers, Leonard Blesius</b>	
<i>Progress in Image Processing Workstations for Remote Sensing</i>	291
<b>Markus Groß</b>	
<i>Advanced Visualization Systems – From Parallel Rendering to Neural Network Imaging</i>	295
<b>Armin Grün</b>	
<i>Digital Photogrammetric Stations for Machine Vision</i>	311

<b>Johannes Raggam, Dieter Strobl, Manfred Buchroithner, Alexander Almer <i>RSG-Workstation Software for Geometric Multisensor Data Processing</i></b>	313
<b>Gunter Schreier <i>A Radargrammetric Workstation for ERS-1</i></b>	326
<b>LIST OF AUTHORS</b>	341