

Roger D. Hersch Jacques André
Heather Brown (Eds.)

Electronic Publishing, Artistic Imaging, and Digital Typography

7th International Conference
on Electronic Publishing, EP'98
Held Jointly with the 4th International Conference
on Raster Imaging and Digital Typography,
RIDT'98
St. Malo, France, March 30 – April 3, 1998
Proceedings



Springer

Table of Contents

Part I: RIDT'98

Artistic Imaging

An Interface for the Interactive Design of Artistic Screens	1
<i>Rudaz N., Hersch R.-D., and Ostromoukhov V.</i>	

Image Mosaics	11
<i>Finkelstein A. and Range M.</i>	

Font Decoration by Automatic Mesh Fitting	23
<i>Browne C.</i>	

Tools and Methods in Typography

A Window-Based Method for Automatic Typographic Parameter Extraction .	44
<i>Hertz J., Hu C., Gonczarowski J., and Hersch R.-D.</i>	

Unified Table Approach for Typographic Rendering	55
<i>Kang B.</i>	

Producing the Skeleton of a Character	66
<i>Gonczarowski J.</i>	

Advanced Tools for Typography

Visual TrueType: A Graphical Method for Authoring Font Intelligence	77
<i>Stamm B.</i>	

Feature-Based Design of Fonts Using Constraints	93
<i>Shamir A. and Rappoport A.</i>	

An Object-Oriented Model for the Hierarchical Composition of Letterforms in Computer-Aided Typeface Design	109
<i>Schneider U.</i>	

Typography and Tools for Non-Latin Type

The Design and Use of a Multiple-Alphabet Font with Omega	126
<i>Haralambous Y. and Plaice J.</i>	

Simplification of the Arabic Script: Three Different Approaches and their Implementations	138
<i>Haralambous Y.</i>	

The Formulation of Parameters for Type Design of Indian Scripts Based on Calligraphic Studies	157
<i>Mohanty S.-K.</i>	

Typographic Creation

Metafont in the Rockies: The Colorado Typemaking Project	167
<i>Southall R.</i>	

Designing and Using Scalable Type for Display as Graphic Elements on Digital Devices	181
<i>Connare V.</i>	
Ornamental Patterns	
Mathematical Tools for Computer-Generated Ornamental Patterns	193
<i>Ostromoukhov V.</i>	
Recognition and Models	
Fundamentals of 3D Halftoning	224
<i>Lou Q. and Stucki P.</i>	
Using Typography in Document Image Analysis	240
<i>Bapst F. and Ingold R.</i>	
A Beta-Velocity Model for Simulating Handwritten Korean Scripts	252
<i>Lee D.-H. and Cho H.-G.</i>	
Part II: Common RIDT'98 and EP'98 sessions	
Legibility and Typography	
Two Decades of Typographic Research at URW: A Retrospective	265
<i>Karow P.</i>	
Legibility of Condensed Perceptually-Tuned Grayscale Fonts	281
<i>Morris R.-A., Hersch R.-D., and Coimbra A.</i>	
Exploring the Effect of Layout on Reading from Screen	294
<i>Dyson M.-C. and Kipping G.-J.</i>	
Fonts and Design	
Internationalized Text Manipulation Covering Perso-Arabic Enhanced for Mongolian Scripts	305
<i>Kataoka T.-I., Kataoka Y., Uezono K., and Ohara H.</i>	
Une bibliothèque informatique pour la notation musicale baroque	319
<i>Bouzaiene N., Le Gall L., and Saint-Jammes É.</i>	
Part III: EP'98	
Page Styles and Structures	
Document Style Design by Direct Manipulation	331
<i>Richy H.</i>	
A DTD Extension for Document Structure Recognition	343
<i>Brügger R., Bapst F., and Ingold R.</i>	
Time Management and Multimedia	
Synchronization in Multimedia Documents	355
<i>King P., Cameron H., Bowman H., and Thompson S.</i>	
Édition et visualisation interactive de documents multimédia	370
<i>Jourdan M., Roisin C., and Tardif L.</i>	
Memory Scalability in Constraint-Based Multimedia Style Sheet Systems ...	381
<i>Cumaranatunge T. and Munson E.-V.</i>	

Electronic and Paper documents

Intelligent Paper	392
<i>Dymetman M. and Copperman M.</i>	
Active Alice: Using Real Paper to Interact with Electronic Text	407
<i>Brown H., Harding R., Lay S., Robinson P., Sheppard D., and Watts R.</i>	
Autotag: A Tool for Creating Structured Document Collections from Printed Materials	420
<i>Taghva K., Condit A., and Borsack J.</i>	

Document Engineering

Hyperbook Data Modeling	432
<i>Fröhlich P., Henze N., and Nejdli W.</i>	
A Component Architecture for Cross-media Formatters	444
<i>Bretthauer T., Brüggemann-Klein A., Hermann S., and Klein R.</i>	

Documents and Linguistics

The Effect of Textual Aesthetics on Information Retrieval	454
<i>Brooks T.-A.</i>	
The Use of Automatic Alignment on Structured Multilingual Documents	464
<i>Ballim A., Coray G., Linden A., and Vanoirbeek C.</i>	

Document Reuse

Design and Implementation of a Document Assembly Workbench	476
<i>Ahonen H., Heikkinen B., Heinonen O., Jaakkola J., Kilpeläinen P., and Lindén G.</i>	
A Virtual Document Interpreter for Reuse of Information	487
<i>Paradis F., Vercoustre A.-M., and Hills B.</i>	
Reuse of Linked Documents through Virtual Document Prescriptions	499
<i>Vercoustre A.-M. and Paradis F.</i>	

Hypertext and the Web

Measuring Structural Similarity Among Web Documents: Preliminary Results	513
<i>Cruz I.-F., Borisov S., Marks M.-A., and Webb T.-R.</i>	
A Tool for Maintaining Multi-variant Hypertext Documents	525
<i>Hu S.-C. and Furuta R.</i>	

Hypertext Creation and Management

Projet Hypermap : pour un environnement complet de génération automatique d'hypertexte	537
<i>Rhissassi H. and Lelu A.</i>	
Dynamic Link Inclusion in Online PDF Journals	550
<i>Proberts S., Brailsford D.-F., Carr L., and Hall W.</i>	
Adding Semantics to SGML Databases	563
<i>Mazumdar S., Yuan G., Bao W., and Price J.</i>	
Author Index	575