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THEORY OF IMAGE ANALYSIS AND RECOGNITION(U) MARYLAND
UNIV COLLEGE PARK COMPUTER SCIENCE CENTER
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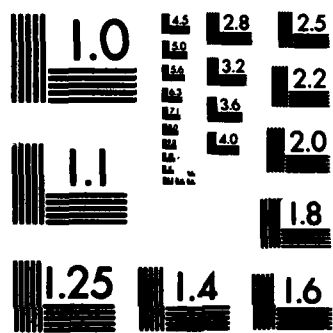


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"THEORY OF IMAGE ANALYSIS AND RECOGNITION"

1 May 1977 - 31 December 1982

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**Directorate of Mathematical and Information Sciences
Air Force Office of Scientific Research
Bolling Air Force Base, D. C. 20332**

Submitted by:

**Computer Science Center
University of Maryland
College Park, MD 20742**

Principal investigators:

**Azriel Rosenfeld, Research Professor
Larry S. Davis, Associate Professor**

January 24, 1983

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The research conducted under the grant was concerned with three theoretical aspects of image analysis: (1) statistical image modeling and texture analysis; (2) digital geometry (geometrical properties of subsets of digital images); and (3) parallel image processing (including formal models for parallel image recognition). During the period 1 May 77-31 Dec 82, 116 technical reports were issued on the grant. Nearly all of these have been published or in process of acceptance for publication. A bibliography of these reports is given. Seven students wrote Ph.D. dissertations with the support of the grant.		

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The research conducted under Grant AFOSR-77-3271 was concerned with three theoretical aspects of image analysis:

- a) Statistical image modeling and texture analysis
- b) Digital geometry (geometrical properties of subsets of digital images)
- c) Parallel image processing (including formal models for parallel image recognition)

During the period May 1977 - December 1982, 116 technical reports were issued on the Grant. Nearly all of these have been published or in process of acceptance for publication. A bibliography of these reports is given below.

Seven students wrote Ph.D. dissertations with the support of the grant:

<u>Area</u>	<u>Student</u>	<u>Topic</u>
a	Narendra Ahuja	Image models
	Ramalingam Chellappa	Image models
	Matti Pietikainen*	Texture analysis
b	David G. Morgenthaler	3D digital geometry
c	Angela Y. Wu	Parallel computation
	Charles R. Dyer	Parallel computation
	Todd R. Kushner	Parallel computation

*Degree awarded by the University of Oulu, Finland

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