Computer Vision

A MODERN APPROACH

FORSYTH ■ PONCE

This extraordinary book gives a uniquely modern view of computer vision. Offering a general survey of the whole computer vision enterprise along with sufficient detail for readers to be able to build useful applications, this book is invaluable in providing a strategic overview of computer vision. With extensive use of probabilistic methods—topics have been selected for their importance, both practically and theoretically—the book gives the most coherent possible synthesis of current views, emphasizing techniques that have been successful in building applications. Readers engaged in computer graphics, robotics, image processing, and imaging in general will find this text an informative reference.

KEY FEATURES

- **Application Surveys**—Numerous examples, including Image Based Rendering and Digital Libraries
- **Boxed Algorithms**—Key algorithms broken out and illustrated in pseudo code
- **Self-Contained**—No need for other references
- **Extensive, Detailed Illustrations**—Examples of inputs and outputs for current methods
- **Programming Assignments**—50 programming assignments and 150 exercises

David A. Forsyth received the Ph.D. degree in Computer Science from Oxford University. He is currently an Associate Professor in the Computer Science Department at the University of California at Berkeley. Professor Forsyth has written over sixty papers and co-authored ten books in the computer vision field. He has received numerous honors and awards.

Jean Ponce received the Ph.D. degree in Computer Science from the University of Paris Orsay. He is currently a Professor at the Beckman Institute at the University of Illinois at Urbana Champaign. Professor Ponce has written numerous papers, journal entries, and co-authored fifteen books on a range of subjects including robotics, computer vision, and computer graphics.

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