Introducing the first text to integrate the topics of digital signal processing (DSP), digital image processing (DIP), and adaptive signal processing (ASP)!

*Digital Signal and Image Processing* helps students develop a well-rounded understanding of these key areas by focusing on fundamental concepts, mathematical foundations, and advanced algorithms.

The presentation is mathematically thorough with clear explanations, numerous examples, illustrations, and applications. In addition to problems, MATLAB-based computer projects are assigned at the end of each chapter, making this book ideal for laboratory-based courses.

The text is appropriate for a stand-alone course on digital signal processing, or a course that introduces a combination of topics in signal processing and image processing. It contains sufficient background material for a fundamental course and ample advanced topics for graduate-level instruction.

**ABOUT THE AUTHOR**

Dr. Tamal Bose serves as Professor and Department Head of Electrical and Computer Engineering at the University of Arizona. He is also the Director of a multi-university NSF Center called the Broadband Wireless Access & Applications Center - BWAC.
 FEATURES

• **Combines digital signal processing (DSP), digital image processing (DIP) and adaptive signal processing (ASP)** -- This broad range of coverage introduces students to more techniques that they may encounter as practicing engineers, and provides flexibility for the instructor to develop a course syllabus.

• **Two-dimensional signal processing topics at the end of some chapters** -- Enables students to do research in this area or in the area of image processing.

• **MATLAB commands at the end of some chapters** -- Students with limited or no experience in MATLAB will be able to learn the basics rapidly.

• **Computer Projects at the end of each chapter** -- These projects provide students with the opportunity to improve their understanding of the algorithms, enabling them to apply recently learned material to practical situations.

To purchase this product, please visit [https://www.wiley.com/en-us/9780471327271](https://www.wiley.com/en-us/9780471327271)