Learning C++
and Java
Together

Programming with Objects: A
Comparative Presentation of
Object-Oriented Programming
with C++ and Java, Avinash C. Kak.
The author compares and contrasts
two of today’s most popular pro-
gramming languages, from basic con-
structs to their use in application-level
programming for domains such as
graphics, networks, and databases.
Given that both C++ and Java
descend from C, learning these lan-
guages together offers several distinct
advantages: It saves time and facilitates
the mastery of each; learning by con-
trast and comparison can be more effi-
cient and enjoyable; and writing a
program in one language that corre-
sponds to a given program in the other
lets students tackle more difficult pro-
jects in either language.
The first half of the text covers basic
language issues, while the second half
details more advanced topics, includ-
ing GUI programming, multithreading,
and network and database program-
ning.
Wiley-Interscience; www.wiley.com;
0-471-26852-6; 1,144 pp.; $79.95.

EMPOWERING DESIGN WITH
RESEARCH
Design Research, Brenda Laurel.
According to the author, designers
can use design research tools to claim
and direct the power of their profes-
sion. The new research models this
book describes can help designers
investigate people, form, and process
in ways that make their work more
rewarding.
This book introduces the many
research tools that can inform design
and offers ideas about how and when
to deploy them effectively. Chapter
authors from locations including
Stanford University, MIT, Intel, Maxis,
Studio Anybody, and Sweden’s HUM-
lab offer observations about how de-
signers can make themselves better at
what they do through research, illus-
trated with real-world examples that
include case studies, anecdotes, and
images.
MIT Press; mitpress.mit.edu; 0-262-
12623-4; 336 pp.; $39.95.

TASK-ORIENTED TESTING
Best Practices for the Formal Soft-
ware Testing Process: A Menu of
Testing Tasks, Rodger D. Drabick.
Software developers should not sim-
ply throw software over the wall to
test engineers when coding is finished.
A coordinated program of peer
reviews and testing not only supple-
ments a good software development
process, it supports it.
This book presents a series of tasks
to help organizations develop a formal
testing process model, along with the
inputs and outputs associated with
each task. These tasks include review
of program plans; development of the
formal test plan; creation of test docu-
mentation; acquisition of automated
testing tools; test execution; updating
test documentation; and tailoring the
model for projects of all sizes.
Dorset House Publishing; www.
dorsethouse.com; 0-932633-58-7; 312
pp.; $41.95.

FROM VIRTUAL TO AUGMENTED
REALITY
Virtual Applications: Applications
with Virtual Inhabited 3D Worlds,
Peter Andersen and Lars Qvortrup,
editors. This collection of essays deals
with the use of virtual inhabited 3D
spaces in different societal domains.
The trend now is to move from virtual
reality—a reality into which users and
objects from the real world should be
moved—to augmented reality, in
which computers move out into the
world of real users, objects, and activi-
ties. The book also covers the use of
virtual inhabited 3D spaces in both
contexts.
The contributors examine VR and
augmented reality use by analyzing the
structure of application domains that
use these technologies: production and
manufacturing, communications sup-
port, scientific research, and artistic
and cultural endeavors.
Springer; www.springer-ny.com; 1-
85233-658-7; 272 pp.; $119.00.