◆ Addison-Wesley

Dear Colleague,

Are all of the science and engineering students at your institution taking courses in CS? Are your CS enrollments declining, in part because students want to work with interesting applications, not usually found in CS1 texts? Are students and faculty complaining that your CS1 course is not relevant?

Over the past decade, we have been developing at Princeton a course based on an interdisciplinary approach to computer science that addresses these questions by appealing to all students with a general interest in science and engineering. Our approach is to teach programming in the context of interesting applications in science, engineering, and commercial computing, leveraging familiar high-school science and math while at the same time preparing students to use computers effectively in later courses.

For CS majors, we provide a solid introduction to Java programming and a full CS1 curriculum. Concepts are motivated by applications, and our scientific approach prepares students to learn computer science in depth later in the curriculum. For science and engineering majors, we teach programming skills in a modern programming environment. We develop a full programming model including graphics, image processing, and sound that students can immediately put to use. Most important, students learn that computation is not merely a tool, but an integral part of the modern world that pervades scientific inquiry and commercial development.

We have used this approach for thousands of undergraduates, and are rapidly approaching our goal of meeeting the needs of all science and engineering students (half of Princeton undergraduates) in a single course. Our number of CS majors and the number of students doing interdisciplinary work that involves computing are both rapidly increasing.

We encourage you to request a copy of our new book
   Introduction to Programming in Java — An Interdisciplinary Approach
to review and consider for your introductory programming course. For more information, send your request to computing@aw.com. To see the scope of the resources supporting the book and a sample chapter, please visit our booksite

       www.cs.princeton.edu/IntroProgramming.

Please feel free to e-mail us directly with any comments or questions that you might have about this book.

Best regards,

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Kevin Wayne   wayne@cs.princeton.edu
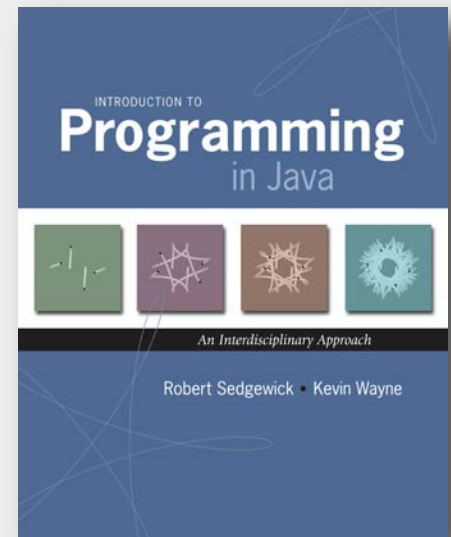
Introduction to Programming in Java
An Interdisciplinary Approach

Robert Sedgewick and Kevin Wayne

CONTENTS

650 pages
230 figures, 120 programs, 450 exercises
ISBN 0-321-49805-4 © 2008