AI Game Programming Wisdom 3 (AI Game Programming Wisdom (W/CD))

Steve Rabin
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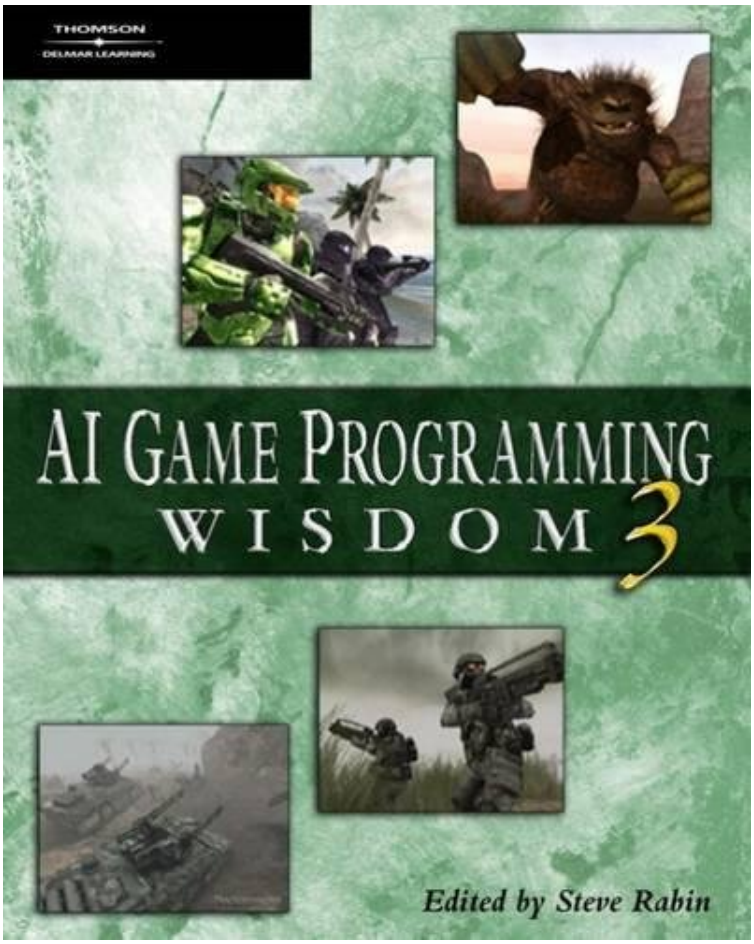

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Steve Rabin : AI Game Programming Wisdom 3 (AI Game Programming Wisdom (W/CD)) before purchasing it in order to gage whether or not it would be worth my time, and all praised AI Game Programming Wisdom 3 (AI Game Programming Wisdom (W/CD)):

21 of 22 people found the following review helpful. A fantastic "a la carte" tool kitBy Dave MarkBeing in the game development business, I am always on the lookout for new and different tricks, techniques and strategies. When most programmers go to the lectures, panels and roundtables at the Game Developers Conference, we are looking to pick up this same sort of material... we share ideas and approaches - but rarely get the chance to get down to the code details to make it easy for us to implement those ideas into our own work. This book makes that possible.Along the lines of the other "Gems" series of books, this collection is filled with ACTUAL techniques and code chunks that are used by some of the top professionals in the industry. Just flipping through the list of the contributors to the book is like going around the room at one of the AI roundtables at the GDC... in fact, Steve Woodcock and Neil Kirby are 2 of the "3 AI

guys" that RUN those roundtables! (The 3rd being Eric Dybsand who has contributed to the "Gems" series but not this title.)Many books on game development are informative. This one is actually USEFULL. I have personally adopted Steve Rabin's source code from the section "Implementing a State Machine Language" into my own game and it has saved me many hours of development and improved the readability and understandability of my code for the rest of the team. Just that section alone has netted at least a 1000:1 return on the cost of this book. Other sections have given me a different approach on how to handle the economic strategy layer that I could have come upon myself... but was able to implement a lot quicker than if I had done it myself. It was definately worth the price.Are any of these sections worth the purchase price for YOU? I suppose that depends on how much you value you your time. Once you equate the cost of the book to the man hours you save, it's a no brainer!0 of 0 people found the following review helpful. Kindle and CD contents?By Richard RanftThe book is pretty good. is the issue here - if there is a download link for the CD content then I haven't been able to find it yet. Thanks !10 of 10 people found the following review helpful. Really informative.By Marek BaczyskiThis is a great reference if you're in need of architectural or conceptual advice regarding AIs. It's not "learn AI in 24 hours" type of book, the reader is assumed to posses substantial knowledge of programming, as implementations aren't usually explained - this is a good thing, because it means there's more pure knowledge inside. (There's a CD with implementations and some sources.)

AI Game Programming Wisdom 3 grants you an insider's look at cutting-edge AI techniques used by industry professionals in such games as Fable, Halo 2, and the Battlefield series. Successful commercial games like these require years of research and development in order to deliver exciting, new gameplay experiences. The wealth of knowledge gained through this hard work is invaluable and by sharing it, the 50+ authors in this book have generously given you the tools and techniques you need to build top tier games. In AI Game Programming Wisdom 3, you'll find an entirely new collection of exclusive tips, tricks, techniques, algorithms, and architectures that can't be found anywhere else. And as with previous volumes, the goal of this book is to offer useful, insightful, and clever ideas to help expand your own personal AI toolbox. New to this volume is the inclusion of longer and more detailed articles that allow for a more in-depth exploration of each topic. With this book, you'll be standing on the shoulders of game industry giants and taking advantage of their hard earned wisdom and insights. So take these techniques, build\ upon them, and lead the industry toward innovative gameplay and the next generation of games.

Preface Acknowledgments About the Cover Image Contributor Bios SECTION 1 GENERAL WISDOM 1.1 Custom Tool Design for Game AI; 1.2 Using STL and Patterns for Game AI; 1.3 Declarative AI Design for Games-Considerations for MMOGs; 1.4 Designing for Emergence; 1.5 Fun Game AI Design for Beginners; 1.6 Strategies for Multiprocessor AI; 1.7 Academic AI Research and Relations with the Game Industry; 1.8 Writing AI as Sport SECTION 2 PATHFINDING 2.1 Cooperative Pathfinding; 2.2 Improving on Near-Optimality: More Techniques for Building Navigation Meshes; 2.3 Smoothing a Navigation Mesh Path; 2.4 Preprocessed Pathfinding Using the GPU SECTION 3 MOVEMENT 3.1 Flow Fields for Movement and Obstacle Avoidance; 3.2 Autonomous Camera Control with Constraint Satisfaction Methods; 3.3 Insect AI 2: Implementation Strategies; 3.4 Intelligent Steering Using Adaptive PID Controllers; 3.5 Fast, Neat, and Under Control: Arbitrating Between Steering Behaviors; 3.6 Real-Time Crowd Simulation Using AI.implant; SECTION 4 ARCHITECTURE 4.1 Flexible Object-Composition Architecture; 4.2 A Goal-Based, Multitasking Agent Architecture; 4.3 Orwellian State Machines; 4.4 A Flexible AI System through Behavior Compositing; 4.5 Goal Trees; 4.6 A Unified Architecture for Goal Planning and Navigation; 4.7 Prioritizing Actions in a Goal-Based RTS AI; 4.8 Extending Simple Weighted-Sum Systems; 4.9 AI Waterfall: Populating Large Worlds Using Limited Resources; 4.10 An Introduction to Behavior-Based Systems for Games; 4.11 Simulating a Plan SECTION 5 TACTICS AND PLANNING 5.1 Probabilistic Target Tracking and Search Using Occupancy Maps; 5.2 Dynamic Tactical Position Evaluation; 5.3 Finding Cover in Dynamic Environments; 5.4 Coordinating Teams of Bots with Hierarchical Task Network Planning SECTION 6 GENRE SPECIFIC 6.1 Training Digital Monsters to Fight in the Real World; 6.2 The Suffering: Game AI Lessons Learned; 6.3 Environmental Awareness in Game Agents; 6.4 Fast and Accurate Gesture Recognition for Character Control; 6.5 Being a Better Buddy: Interpreting the Player's Behavior; 6.6 Ant Colony Organization for MMORPG and RTS Creature Resource Gathering; 6.7 RTS Citizen Unit AI; 6.8 A Combat Flight Simulation AI Framework SECTION 7 SCRIPTING AND DIALOG 7.1 Opinion Systems; 7.2 An Analysis of Far Cry Instincts' Anchor System; 7.3 Creating a Visual Scripting System; 7.4 Intelligent Story Direction in the Interactive Drama Architecture SECTION 8 LEARNING AND ADAPTATION 8.1 Practical Algorithms for In-Game Learning; 8.2 A Brief Comparison of Machine Learning Methods; 8.3 Introduction to Hidden Markov Models; 8.4 Preference-Based Player Modeling; 8.5 Dynamic Scripting; 8.6 Encoding Schemes and Fitness Functions for Genetic Algorithms; 8.7 A New Look at Learning and Games; 8.8 Constructing Adaptive AI Using Knowledge-Based Neuroevolution About the CD-ROM IndexAbout the AuthorSteve Rabin is a Principal Software Engineer at Nintendo of America, where he researches new techniques for Nintendo's next generation systems, develops tools, and supports Nintendo developers. Before Nintendo, Steve worked primarily as an AI engineer at several Seattle start-ups including Gas Powered Games,WizBang Software Productions, and Surreal

Software. He managed and edited the AI Game Programming Wisdom series of books, as well as the book Introduction to Game Development, and has over a dozen articles published in the Game Programming Gems series. He's spoken at the Game Developers Conference and moderates the AI roundtables. Steve teaches artificial intelligence at both the University of Washington Extension and at the DigiPen Institute of Technology. He earned a B.S. in computer engineering and an M.S. in computer science, both from the University of Washington.