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chapter 14 Combining Scripted Behavior with Game Tree Search for Stronger, More Robust Game AI / Barriga Nicolas A. -- section III Movement and Pathfinding -- chapter 15 Steering against Complex Vehicles in Assassins Creed Syndicate / Eric Martel -- chapter 16 Predictive Animation Control Using Simulations and Fitted Models / Ingimar Holm Guðmundsson -- chapter 17 Fast Cars, Big City -- The AI of Driver San Francisco / Chris Jenner -- chapter 18 A Unified Theory of Locomotion / Graham Pentheny -- chapter 19 RVO and ORCA -- How They Really Work / Ben Sunshine-Hill -- chapter 20 Optimization for Smooth Paths / Mark Langerak -- chapter 21 3D Flight Navigation Using Sparse Voxel Octrees / Daniel Brewer -- chapter 22 Faster A\* with Goal Bounding / Steve Rabin -- chapter 23 Faster Dijkstra Search on Uniform Cost Grids / Nathan R. Sturtevant -- section IV Tactics and Strategy -- chapter 24 Being Where It Counts -- Telling Paragon Bots Where to Go / Mieszko Zielin ski -- chapter 25 Combat Outcome Prediction for Real-Time Strategy Games / Marius Stanescu -- chapter 26 Guide to Effective Auto-Generated Spatial Queries / Eric Johnson -- chapter 27 The Role of Time in Spatio-Temporal Reasoning -- Three Examples from Tower Defense / Baylor Wetzel -- chapter 28 Pitfalls and Solutions When Using Monte Carlo Tree Search for Strategy and Tactical Games / Gijs-Jan Roelofs -- chapter 29 Petri Nets and AI Arbitration / Sergio Ocio Barriaes -- chapter 30 Hierarchical Portfolio Search in Prismata / David Churchill -- section V Character Behavior -- chapter 31 Behavior Decision System -- Dragon Age Inquisitions Utility Scoring Architecture / Sebastian Hanlon -- chapter 32 Paragon Bots -- A Bag of Tricks / Mieszko Zielin ski -- chapter 33 Using Your Combat AI Accuracy to Balance Difficulty / Sergio Ocio Barriaes -- chapter 34 1000 NPCs at 60 FPS / Robert Zubek -- chapter 35 Ambient Interactions -- Improving Believability by Leveraging Rule-Based AI / Hendrik Skubch -- chapter 36 Stochastic Grammars -- Not Just for Words! / Mike Lewis -- chapter 37 Simulating Character Knowledge Phenomena in Talk of the Town / James Ryan -- section VI Odds and Ends -- chapter 38 Procedural Level and Story Generation Using Tag-Based Content Selection / Jurie Horneman -- chapter 39 Recommendation Systems in Games / Ben G. Weber -- chapter 40 Vintage Random Number Generators / Eric Jacopin -- chapter 41 Leveraging Plausibility Orderings to Achieve Extremely Efficient Data Compression / Rollason Jeff -- chapter 42 Building Custom Static Checkers Using Declarative Programming / Ian Horswill.

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### Sommario/riassunto

Game AI Pro3: Collected Wisdom of Game AI Professionals presents state-of-the-art tips, tricks, and techniques drawn from developers of shipped commercial games as well as some of the best-known academics in the field. This book acts as a toolbox of proven techniques coupled with the newest advances in game AI. These techniques can be applied to almost any game and include topics such as behavior trees, utility theory, path planning, character behavior, and tactical reasoning.

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