

## BUILDING ALGORITHMIC TRADING SYSTEMS

A TRADER'S JOURNEY
FROM DATA MINING
TO MONTE CARLO SIMULATION
TO LIVE TRADING

KEVIN J. DAVEY

WILEY

### Building Winning Algorithmic Trading Systems

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# Building Winning Algorithmic Trading Systems

A Trader's Journey from Data Mining to Monte Carlo Simulation to Live Trading

Kevin J. Davey

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To Amy, Owen, Kathryn, Andrew, and Guardian Angel Anthony— My love, my children, my life

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There are many people without whom this book, and my trading career, would not have been possible. First on the list are my Mom and Dad. They stressed self-reliance and taking responsibility for one's actions. These are great traits for everyone to have, and they are really critical for traders. I owe my start to them.

Of course, none of my success would have been possible without my great wife, Amy. Imagine a spouse who fully supported her husband as he walked away from a great career to become a trader, an endeavor where 90 percent of people fail. Her support has been 100 percent positive, and I cannot imagine surviving as a trader, and a person, without it. She is one in a million, and I'm lucky to have found her.

Finally, this book would not be possible without the many traders and wannabe traders who have contacted me over the years. Realizing my words actually helped individuals avoid the many unscrupulous people in this industry gives me great joy. I hope reading this book helps you in the same way.

Happy Trading!

Kevin J. Davey May 2014 ix

#### ABOUT THE AUTHOR

Kevin Davey is a professional trader and a top-performing systems developer. He generated triple-digit annual returns 148 percent, 107 percent, and 112 percent in three consecutive World Cup of Futures Trading Championships® using algorithmic trading systems. His web site, www.kjtradingsystems.com, provides trading systems, trading signals, and mentoring. He writes extensively in industry publications such as Futures Magazine and Active Trader and was featured as a "Market Master" in the book The Universal Principles of Successful Trading by Brent Penfold (Wiley, 2010). Active in social media, he has over 15,000 Twitter followers. An aerospace engineer and MBA by background, Davey has been an independent trader for over 20 years. Davey continues to trade full time and develop algorithmic trading strategies.

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I wanted to throw up. The bile in my stomach had reached an unsustainable level, but there was no bathroom near me. Speeding down the freeway at 75 miles per hour, with no exit in sight, I'd have to swallow hard and accept my fate. I really wanted to just curl up and die. Well, not exactly. I wanted to vomit first, then curl up and die.

Was it trichinosis from eating pork not cooked to shoe leather consistency, as my Mom always predicted would happen? Nope. An undercooked juicy red hamburger laced with *E. coli*? Not exactly. It was meat that was the culprit, but in the form of live cattle. Live cattle futures, to be exact. Live cattle, all 40,000 pounds of them, had led to my sudden urge to vomit. Specifically, bovine spongiform encephalopathy, more commonly known as mad cow disease. I didn't have the disease, but my ill-fated speculative investment did.

This was at the end of December 2003, a month that had started with great personal and professional promise. I recently had been promoted to vice president of quality assurance at Argo-Tech, the midsize aerospace firm I was lucky enough to be part of, before it was bought out by a soulless mammoth corporation. I also had been honored as a "40 Under 40" recipient from *Crain's Cleveland Business* magazine—recognized as one of Cleveland, Ohio's, up-and-coming business stars under the age of 40. My futures trading account was doing pretty well, to the point where I felt confident I knew what I was doing (many times that feeling is soon followed by a slap in the face by the market, but I digress). Finally, my first child was on the way in a few months. All things considered, I was on a roll.

Then disaster struck. Three times. Quickly.

On December 12, 2003, my beautiful and amazing wife Amy and I had our first son, Anthony. He was two months premature and was stillborn. The joy of planning