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Vector Search with JavaScript

Build Intelligent Search Systems
with AI

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Foreword

I still remember the first time I had to test a recommendation system powered by AI. This was one of the most advanced features our product offered. I was excited, but also completely out of my depth. As someone who was used to working with deterministic systems, I was thrown into a world where there were no concrete expectations - just probabilities and learned behavior. “Correct” became a range, not an absolute. And I had to figure out how to test it anyway.

To do that, I didn’t just automate inputs and assert outputs. I had to train the system, simulate customer usage, and apply some good old-fashioned common sense. I had to challenge assumptions, ask better questions, and think critically about how this “intelligent” system was making decisions that affected real users. It pushed me out of my comfort zone, and honestly, I’m better for it.

That experience taught me something important. If you’re going to work with AI, it’s in your best interest to understand how it works, what it’s optimizing for, and how those choices impact real people.

Vector Search with JavaScript is the book I wish I had when I first started working in this space. Vector search is one of those techniques that can seem like magic. But behind that magic are embeddings, similarity scores, and complex math. If you don’t grasp what those pieces are doing, it’s easy to misapply them or misinterpret the results.

Ben makes this topic accessible, practical, and even fun. He walks you through how vector search works, what embeddings are really doing, and how to build an intelligent search system that responds based on meaning, not just matching words.

This book is especially timely. As developers, we’re being asked to integrate AI into more and more of our applications. Understanding what that *really* means is a competitive advantage. Ben highlights how real companies are using these techniques to make their products smarter and more helpful. He

also reinforces your learning by having you build a fully featured app and apply vector search to realistic data, just like modern apps do today.

If you're a developer who wants to go beyond keyword search and start delivering smarter, more relevant results, this book is your guide.

Angie Jones, VP, Developer Relations