Using Vibe Coding with Windsurf to build this application was nothing short of mind-blowing. In just a few hours, mostly due to my ignorance, the AI generated a full-stack solution that visualizes the intricacies of neural networks. From data ingestion and preprocessing all the way through interactive front-end exploration. What worked well was the ability to speak in natural language. I could describe complex requirements without wrestling with precise syntax or library imports. The AI translated my high-level vision into functioning code, rapidly coding both backend files and dynamic visual components.

That said, the pace of change was at times overwhelming. Seeing implementation details unfold in real time, often before I had fully processed the previous update, made incremental debugging feel challenging. I discovered that framing one comprehensive, detailed request up front was more effective than iterating in tiny steps. Once the AI delivered the complete feature set, I could review the architecture holistically and understand how each piece fit together.

Compared to traditional coding workflows, where a project of this scope might take an entire semester, Vibe Coding accelerated development by orders of magnitude. It’s clear that AI-driven full-stack development is ushering in a new era for data analytics and application engineering.