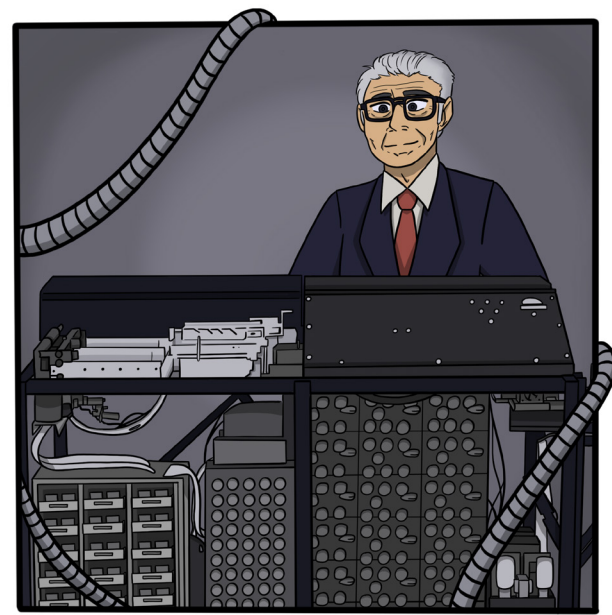


Scientists and Inventors

John Vincent Atanasoff, Inventor

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John Vincent Atanasoff was driving. It was a cold winter night; snow blurred his windshield into a frosty haze, and the road was starting to turn white. John was frustrated and needed to be alone with his thoughts. So, he drove. He'd been trying for years to create a computing device, meeting failure after failure. His wife, Lura, and their three children were at home, near the Iowa State campus.

While working as an assistant professor of mathematics and physics at Iowa State, John often needed to figure out complex mathematical equations. If only there were a machine to compute these numbers quickly, he often thought to himself. For years now, John had tried to design such a machine.

WELCOME TO ILLINOIS, the sign read as John's car whizzed past.

Illinois? John thought. I've gone so far!

He soon saw a roadhouse just ahead, pulled into the lot, parked and walked inside. He made his way to the bar and ordered a warm drink.

How did I get here? John thought to himself, sipping the drink.

It had been a long road, figuratively and literally. John's father immigrated to the US from Bulgaria. John Vincent Atanasoff was born in New York in 1903. John had grown up the son of an electrical engineer and a schoolteacher. He was drawn to mathematics and physics as a way of understanding how the world works. This brought him to the University of Florida, where he graduated with his Bachelor of Science degree in electrical engineering.

He then moved to Iowa State, where he got his master's degree in mathematics. Finally, he earned a Ph.D. in physics from the University of Wisconsin-Madison. Iowa State then hired him as a professor. He loved his work, but the computations were often tedious. The Monroe calculator helped, but still took a toll. There had to be a better method.

As John sat at the bar, the drink relaxed him. He fell into a pensive, thinking zone. Thoughts started to float into his head, ordered into a path through his problem.

Electricity would give a computing device speed John thought.

"Excuse me, sir," John said to the bartender. "Could I trouble you for an ink pen?"

The bartender scrounged around in his apron, producing a pen. John hastily scribbled his thoughts on a cocktail napkin.

The binary number system would simplify the process. Regenerative memory would reduce the cost of building the machine. Direct logical action would increase accuracy.

John capped the pen, feeling triumphant. He slammed his drink down, pushed some cash across the bar, hustled to his car and pointed it towards Iowa State where he would go on to build the Atanasoff-Berry Computer or the ABC. The ABC is widely regarded as the first electrical, digital computer. In 1990, President George H.W. Bush awarded John Vincent Atanasoff the United States National Medal of Technology for his groundbreaking work. It is just one of his many honors.

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