Kaleb Luse originally wanted to major in aeronautical engineering because he was an avionics technician in the military. Moreover, he thought it would be cool to tell his friends, “It’s not rocket science... O wait, it is!”

He had to change his plans, though. There was a change in his base’s mission and, subsequently, his assignment in the military.

“I ended up working with computers,” Kaleb recalls. “So, I decided to change my major to computer science, which, I thought, would better reflect my new job.”

The change, as it turned out, was a blessing in disguise.

“As soon as I started taking classes I knew that this was the major I was supposed to be in,” Kaleb says. “I enjoyed programming and learning about the various components of computer science was interesting and engaging.”

Enrollment at the University of Northern Iowa also turned out to be the “best choice” that he could have made.

“I actually chose UNI for what most would consider poor reasons,” he says. “I wanted to stay in Iowa and had to go to a public university.”

Kaleb didn’t have any favorite among the three big universities in the state but was leaning towards UNI because his best friend had chosen to come here.

“Eventually I grew apart from my best friend but realized that UNI was the best choice I could have made,” he says.

He believes he has been able to pursue opportunities at UNI that he may not have had elsewhere. For example, he says, his research with model trains made him aware of his passion for embedded systems and artificial intelligence (AI).

Kaleb also enjoys working with the computer science faculty. “They are incredibly approachable,” he says.

“It’s nice to have a faculty that teaches full-time as opposed to the research colleges where you may have a professor who teaches once every five years because they have to, in order to continue receiving grant or something like that.”

Kaleb is also a business major and finds his coursework there not as challenging as it is in computer science.

“I find my business classes a lot easier than my CS classes but they are harder to find the motivation to study for,” he says.

He enjoys any class that requires programming but would rate the Real-time Embedded Systems and Intelligent Systems as his two most-favorite classes. The two classes also featured projects that he found most interesting.

He programmed an application to control a model trainset in the Real-time Embedded Systems class. He also developed an artificially intelligent application in his Intelligent Systems class to run regressions on data.

These classes and others have helped Kaleb develop his skills to conduct his own projects. “I am currently building another artificially intelligent program to play an online card game,” he says. “I have also done plenty of research in both my economics field and artificial intelligence.”

He doesn’t have much free time outside of his “classes, organizations, jobs, and random other things,” and this summer was “the closest thing” he had to free time. So, what did he do with his free time? He wrote the code for the artificially intelligent application for his online card game.

Kaleb worked as a resident assistant in Noehren Hall for two years and enjoyed the experience. “The people on the campus are really friendly,” he says.

This summer, he did an internship in Pennsylvania with the defense contractor Lockheed Martin. He is a member of the Air National Guard and works there as a system administrator.
He also volunteers for Phi Sigma Pi in its service events such as “going to the boys and girls club, hosting spaghetti suppers for community members in need, creating food and clothing drives, and working with organizations like the Red Cross.”

Kaleb has recently signed up as a STEM Ambassador. “I really enjoy my major and am very passionate about what I do and I wanted a way to share that passion with someone else who might also have an interest in what I do,” he says.

He wants to work as a software engineer once he gets his bachelor’s degree but hopes to continue with his education and get a master’s degree.

“I have been applying to a lot of different tech companies out in Silicon Valley like Google, Apple, and Facebook,” Kaleb says. “To work for Google as a software engineer will be my dream job.”

In the long run, though, he wants to start his own business. “After 10 years in the industry, I’d like to utilize my business degree and open a business that does consulting for other businesses, companies that look for ways to benefit from AI applications,” he says.

Kaleb believes STEM majors are difficult but engaging, and his advice for those who are interested in STEM is to pursue their interest with passion.

“If you can work on and study what interests you, college and life will be a whole lot easier, not easy but easier,” he says.

Kaleb also believes it is natural for someone signing up for Computer Science to “feel overwhelmed by the fact that some people around you seem to know everything.”

“I remember being a freshman and feeling so out of place in my major because everyone around me seemed to have experience with computers and coding,” he says. “I knew nothing.”

However, knowing nothing worked to his advantage in the long run.

“As it turned out, many of them had picked up poor techniques and found it very hard to unlearn those techniques,” Kaleb says. “They may have also thought that they didn’t have to learn the basics over again and thus missed out on very important topics that built onto later things.”