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CPE008

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FINAL EXAM: REFLECTION PAPER

When I walked into CPE008 as a freshman, I didn't really know what computer engineering was about. I figured it had something to do with computers, some programming, maybe building machines. But this subject quickly opened my eyes. Over the semester, I started to see computer engineering as so much more than just a technical field it's this constantly evolving mix of hardware, software, and creativity. The class pushed me out of my comfort zone, gave me direction, and honestly, just made me realize how complicated the tech I use every day really is.

One thing that stood out to me was how broad the field actually is. Before this, I had no clue computer engineering covered things like embedded systems, microprocessors, digital logic, networking, or even artificial intelligence. Turns out, you have to know your way around both hardware and software. That's what really sets computer engineers apart; we're the bridge between programmers and electrical engineers. Programmers go deep into code, electrical engineers focus on circuits and power, and computer engineers? We're somewhere in the middle, tying it all together.

Learning about what computer engineers actually do was another big moment for me. I realized this course sets you up for all sorts of jobs, network admin, cybersecurity, robotics, embedded systems, system engineering, even machine learning. That kind of flexibility is exciting. It means I can steer my career toward what interests me most as I grow.

The class also drilled into me how important analytical thinking and problem-solving are. Sometimes, I'd get stuck like when we talked about how CPUs interpret instructions or how data flows through a system. Those moments frustrated me, but I learned to break problems down, be patient, and just keep going. That skill isn't just for school; it comes in handy everywhere.

CPE008 also got me thinking about the bigger picture of how technology shapes the world. I started noticing how much computer systems run everything: our phones, banks, hospitals, even traffic lights. It's wild to realize the kind of impact our work as future engineers can have on people's lives. That thought pushes me to take my studies seriously. There's real responsibility here.

Another thing I didn't expect was the focus on ethics. We talked about the importance of being responsible with technology, especially with concerns around automation, cybersecurity, and privacy on the rise. We can't just build things because we can. We need to make sure they're safe and fair, and that we're not creating problems or misusing information. CPE008 really hammered home that we have to use technology wisely, because it's powerful and it matters.

Of course, there were tough moments. Sometimes the material felt overwhelming. But the discussions, activities, and explanations helped make things click. I learned that studying computer engineering takes patience, consistency, and curiosity. I also liked how the class encouraged us to work together. Engineering isn't a solo act; you need to share ideas and tackle problems as a team.

Looking back, CPE008 changed the way I see computer engineering. It gave me a wider perspective on the field and motivated me to keep moving forward. I picked up a lot of technical knowledge, but just as importantly, I learned about the responsibilities that come with this path. Now, as I head into the next part of my program, I feel ready and excited. This subject laid the groundwork and made me confident I'm in the right place. I can't wait to see where this journey takes me.