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Texas Instruments

12500 TI Blvd,

Dallas, TX 75243

Greetings,

I am interested in the Applications Engineering Internship as discussed earlier this week at the UF ECE Career Fair. In addition to meeting the requirements, I have experience developing projects in teams and working with the challenges presented in that process. Further, through this and working as a PI, writing and maintaining documentation for assignments and projects to effectively communicate requirements and specifications to be met or details about what certain API functions do has become part of my daily workload.

As far as debugging skills, for labs in microprocessors one or two, figuring out the state of the processor at any given time to identify erratic behavior often involved not just stepping through the program but also observing UART/SPI/I2C communications and other peripheral devices with Oscilloscopes/LSAs to try and gather more information about the bug. I also have some experience developing test benches for VHDL entities, attempting to capture all edge cases to verify the correctness of implementations, and then identifying problems in the resulting waveform.

I understand there is no substitute for experience working on real, production-level projects; however, through my research experience with the Embedded Systems Lab at UF, I spent time working with graduate students and other undergraduates on verifying real trusted execution environment (TEE) solutions. Not only did I learn a lot about TEEs, but I also benefitted from the opportunity to dive into the implementation of Intel’s TDX module, as I got the experience of reading and understanding production-level code to the point where I developed a model for it to encapsulate the data confidentiality mechanisms.

I would be excited to work for TI to develop myself and contribute to your designs. If you have any questions, please feel free to reach out through my cell, (904)-571-7566, or email at [emmett.kogan@gmail.com](mailto:emmett.kogan@gmail.com). Thank you for your time.

Regards,



Emmett Kogan