329990 Georgia Tech Station

Atlanta, GA 30332

January 28, 2015

Hiring Manager

Apple, Inc

Dear Hiring Manager:

I am interested in applying for the GPU Engineering Internship. With my knowledge of computer architecture, digital design, and project teamwork experience, I can excel as your summer intern and serve Apple well.

Over the past two and a half years I have begun to develop my skills as a computer engineer at the Georgia Institute of Technology. Computers have been my interest since high school and I have been using and programming on a variety of machines running Linux, Android, OSX, and Windows since then. Taking computer architecture last semester at Georgia Tech allowed me to learn the functionality and details of processor design. Our most intensive project was emulating a 5 stage pipelined processor in C, which included stalls for specific dependencies. After this we also added a multi-level cache hierarchy, also written in C, which emulated a L1 and L2 caches and was able to access DRAM. We were also taught as to how these same concepts apply to a GPU processor cores. Even though I do not have much experience the graphics software area, I am diligent, detail-oriented, and eager to learn more.

I have gained my digital design and project teamwork skills through IEEE hardware team, as well as classes at Georgia Tech. In IEEE hardware team, the team has placed me in charge of the programming sub-team. My sub-team and I are pursuing motor control, navigation, and communication between Beaglebone and Arduino. I am actively involved in assisting members in problems, allocating tasks, and verifying that the separately created software will work together. In Digital Design Laboratory I got my first experience to work with a group of students across a variety of skill levels on a digital design and programming project, a final presentation, and multiple technical reports. We were tasked with designing a simple computer via logic gates and VHDL to program an FPGA to receive IR signals and convert them into movement commands for the robot. Throughout the project the team pursued the perfection of robot’s navigation and response time. We were able to find an un-intentional error in the source code, which solved a repeated command problem for our team. Our pursuit of precision in programming resulted in me achieving a time of 26 seconds to navigation an obstacle course; the sixth best time out of 20 teams.

After you review my resume for additional details on my qualifications and experience, I will be happy to answer any questions you may have. Please contact me so we can discuss how my skills and experience in computer engineering can benefit Apple, Inc.

Sincerely,

Pratik Gangwani