Jan 13, 2019

Dear CS 3992,

I'm currently enrolled as a senior in the Computer Engineering program at the University of Utah. My expected graduation year is 2019. As an individual who is interested in continuous professional development, I want to find an opportunity where I can demonstrate my skills, and expand them through this project and in the technical industry down the road.

A potential project that I'd be interested in working on would be creating a digital audio workstation. A digital audio workstation is a software that allows users to record and track audio. Audio tracks can be layered and played-back simultaneously to create full sounding recordings. In addition to creating the software, the project would include building a custom interface that allowed users to plug in instruments: guitar, bass, keyboards etc. These instruments would send analog signals into the interface and the interface would perform a conversion to a digital signal. The computer and software would then be able to read this digital signal and apply manipulations or effects to the signal to create effects.

I think this idea should be supported because a digital audio workstation that's easy to use and available for free can be valuable to musical communities. If the project was later made open source, lots of individuals would be able to collaborate and make it even better. This idea could also be a perfect example of hardware and software interfacing with each other. Which is a core principle of Computer Engineering.

Currently employed with Colmek and Huntsman Cancer Institute, I've demonstrated strong problem-solving skills and the ability to work in high-pressure and challenging working environments. Holding two employment opportunities and going to school full time also demonstrates my time management skills. Majority of the time, I work independently, carrying the responsibility of the department. I have to be able to make snap judgement calls, and solve problems without assistance. This experience has developed my confidence, helped me learn how to prioritize issues, and taught me how to interact effectively with a wide variety of people.

I have functional knowledge of programming languages (C, C#, Java) that I've attained through my education. I want to invest my time into this project where I can develop my abilities and demonstrate my strong attributes. In my free time I love to play drums in a band, and go to concerts. I also enjoy playing/modding video games and consoles.

Thank you for your consideration, I look forward to hearing from you soon.

Sincerely,
Jonathan Pilling