

I feel strongly that Jerrick Liu has the capability to succeed and be a credit to any college, even the most demanding. I have no hesitation at all in recommending him to your program.

In fact, Jerrick Liu astounded me before I even *met* him. I had the pleasure and privilege of mentoring him as part of the Wright Scholars summer intern program, along with my fellow Air Force Research Laboratory co-worker, James Patrick. Before he had even *started working*, Mr. Liu reached out to us for advice, within days he had begun stumping me with difficult questions about Convolutional Neural Network architectures. I was supposed to be his mentor, but ended up learning so much myself. It was wonderful!

Once he began actually working, I then found Jerrick to be polite, well-groomed, respectful, sensible, and very resourceful. Given difficult tasks, he learned quickly, knocked the work out ahead of schedule, and came back asking for more. Several times, we had to revise the scope of the summer project to make it more far-reaching, simply because he had finished it too quickly and well.

He consistently displayed independence and self-direction. For example, rather than requiring detailed explanations of Pytorch, deep learning algorithms, or how to use the various IDEs and OS environments, it was sufficient to simply give general direction. Jerrick found and used the learning resources he needed in order to learn the appropriate tools for the task, only coming to us when truly stymied. Which was rare.

I also enjoyed the fact that he was also willing and capable of indulging me in fun activities as well: thought experiments, logic puzzles, and the like. On one occasion, I gave him the first several terms of an integer sequence (<https://oeis.org/A005150> specifically), and enjoyed watching his process of working it out. From this I learned more about his inquisitive and curious nature.

It was even more impressive to learn about the dizzying number of clubs and organizations that Jerrick managed to balance, yet was capable of staying on top of. Science, Chess, golf...

Yet, when I questioned him about it, I was glad to find that his answers were quite sensible. The myriad organizations did not have overlapping time commitments. So I believe that Jerrick has shown he is capable of wise and careful allocation of time, and energy.

So I have personally seen that Jerrick is enthusiastic, intelligent, personable, and capable of balancing demanding schedules. All these are traits that predict success in academics, and he exhibits them to a degree I have not seen in other people his age.

My sincere wish is that Jerrick will find a school that will challenge him sufficiently, and teach him enough, that he can grow. I want to see what he will make of himself!

I therefore feel completely confident in recommending Jerrick Liu to any school he might pick.