

I am someone curious who likes to learn and to take on new challenges. I've had many divergent interests in my studies, from psychology to neuroscience with statistics and machine learning in between. Reaching out to learn different fields has been challenging, but I am the kind of person to do whatever it takes to learn what I find interesting. This approach not only made my academic experience so much more fun and satisfying, but also allows me to understand the brain from different perspectives. I look forward to combining these different interests in my PhD by working on computational models and theories of the brain.

Even though I pursue to understand the complexity of the human mind, I've always had a passion for mathematics and logic. So, I complemented my psychology bachelors by taking classes in both statistics and programming. Even during my first year, I felt that I was at a disadvantage compared to mathematics and computer science majors. For example, in my probability class I had to learn some new operations on my own (e.g. double integrals) and before taking my programming class I did not even know what a command line was. This was not really yet a problem because I was happy to learn new material and saw it as an opportunity to grow. Having been really satisfied by the theoretical statistics class taken in my second year, I was motivated to start my 3rd year by taking an even more advanced statistics class. This course taught the theory and proofs behind regression and ANOVAs, and as early as the second class of the semester I failed to understand what was written on the board. The class required strong knowledge in linear algebra, which I was missing. However, this did not discourage me from taking the course. The following day, I borrowed linear algebra textbooks from the

library and started learning on my own. The class content was fascinating to me, and I wanted to learn more of it. I kept working hard and eventually became that student always sitting in the first row asking questions. I was rewarded for my perseverance and developed an excellent conceptual understanding of the mathematics behind the standard parametric tests we routinely use in research. This perseverance allowed me to become quite knowledgeable about statistics, usually the one my neuroscience and psychology colleagues refer to when in need of help to analyze data.

A similar scenario happened to me in my last semester of undergraduate studies, when I became curious enough about machine learning to take a graduate-level computer science course in it. I was afraid I would be set back due to my relatively poor backgrounds in computer science and mathematics. I was especially worried when I learned most of the coursework would be group projects and that everyone would be using python, a programming language I barely knew back then. However, my interest allowed me to keep up with the heavy content and my hard work allowed me to learn python quickly and become an asset to my team projects. I've even been able to apply the machine learning techniques I've learned to neuroscience problems in my graduate research.

These experiences are what I want my academic life to be like. I strive for the satisfaction of understanding new interesting ideas and acquiring new skills. The next challenge I have in mind is to build computational models of how the brain learns to wire itself. UC Berkeley, with its Redwood Center for Theoretical Neuroscience, would be the ideal opportunity for me to accomplish such goals.