Doctor of Philosophy

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**Introduction**

The purpose of this report is to summarize my research findings, reflect on my professional profile, and describe what types of writing and communication will be expected of me on an ordinary basis as a STEM graduate student. I have received several resumes and CVs from graduate students, Ph. D., and post doc that I personally know. I have also conducted an informal review with two graduate students and looked up various admissions data online. My personal strengths are high GPA, amount of conducted research/work, diverse curriculum and experiences, as well as honors. My weaknesses are lack of extra-curriculars, average writing skill, and poor networking skills. Graduate students are expected to communicate formally and informally with faculty, fellow students, and other researchers. Graduate students are also expected to write and edit scholarly articles, grade papers, and possibly write grant proposals. In addition, graduate students are expected to be able to communicate effectively with NNSE in lab, university, and at conferences.

**Summary of Research Findings**

Graduate students in successful graduate programs (eg., John Hopkins, UCSD) have also had successful carrier in their perspective undergraduate universities. According to UCSD department of Bioinformatics and Systems Biology average GPA of admitted students is 3.67 and average GRE score is 1340.61. Admittance rate to various graduate departments varies strongly based on school and major. For example, according to UCLA website, UCLA bioinformatics department admitted 20% of applicants while the biomedical engineering department admitted 38%. By looking at multiple graduate school admission requirements I noticed that all of them require 3 letters of recommendation, general and (preferably subject) GRE, statement of purpose, and sometimes appropriate coursework. By looking at resumes supplied by my colleagues, friends, and family that are or were graduate students no so long ago, I noted some commonalities. They all had high undergraduate GPA and GRE scores. They all have done something to stand out in undergraduate career (eg., scholarships, internships, research, extra curriculars, and etc..). Additionally I have looked at requirements for staying in Ph. D. program at UCLA, on their website. Some of the key once are maintaining high GPA (above 3.0), passing oral and written examination by certain year, making timely progress, taking appropriate coursework, doing research, and being a teaching assistant for at least a quarter.

**Current Professional Profile - Strengths**

One of my current professional strengths is high GPA in both major and non-major coursework. I also have completed 300 hours of research, and have a verbal contract to complete 600 more hours of paid research within UCI cognitive robotics department. I have also worked for 300 hours during the summer at Riverbed Inc, where I have learned and practiced basics of web design. Furthermore I have received dean’s honors nearly every quarter, and have been awarded Phi Beta Kappa membership. As a computer science and engineering (CSE) major I have been exposed to key engineering and computer science concepts, thus, giving me a view of both disciplines and the interrelations between the two. Moreover, because I spent my first year and a half at UCI as a biomedical engineering major I have been exposed to some biomedical concepts and curriculum. Diversity of my curriculum relates to diversity of my research/internship. My first research at UCI revolved around game design. My internships had to with web design, and my current research has to do with Neural Networks. I have also progressed quite a lot in my ability as a programmer and engineer. My first research was unpaid and without regular hours. Eighteen months later, I learned a lot at my internship, however, I was paid just slightly above minimum wage, and I’ve spent almost as many hours learning new concepts as applying them. About a month after my internship was over I found and interviewed for my current research. I was able to secure a position thanks to the practice I’ve received at my previous interviews at various companies. The research I do now requires some understanding and background in neuro science, computer science, and math. I am one of the only 2 undergraduates in the lab, out of about dozen people, and the work I contribute to is used by researchers at other universities/companies. I absolutely love what I do; I certainly appreciate being paid for it. This experience as a whole has affirmed my desire to go on to graduate school.

**Current Professional Profile - Areas to Focus On**

I need to practice my writing skills, especially grammar. I have never learned proper grammar, and due to lack of practice my writing ability is currently at a low. Writing ability is incredibly important, whether it comes to writing cover letters, resumes, grant proposals, scholarly articles, scholarship applications, statement of purpose, or completing GRE writing section. I also need to work on my networking skills. Currently I do not know many professionals in my fields of interest and communicate little with fellow students. I also lack extra-curricular activities, but it is a little late to start joining clubs/organizations now in my opinion.

**Expectations for Writing and Communication**

As I mentioned in sections above writing is incredibly important for a graduate student. Ability to communicate effectively (verbally and in writing) with faculty, fellow researchers, and students is also key to successful and fulfilling graduate career. Graduate programs usually have a lot of talented foreign students that are not native speakers of English. Several people in my research lab at UCI are NNSE. One is from China, and few others are from Europe. Moreover, I noticed that graduate students, post docs, and professors in my lab travel to quiet a lot of conferences abroad, where sometimes majority of speakers are NNSE. Therefore, ability to understand and communicate with NNSEs is crucial. As a NNSE myself, and having experience talking to many non-native speakers of English throughout my eight years living in US I feel strongly prepared for any future communication with NNSEs.