

Statement of purpose by Imad Mouline

Usually parents ask their children about their future career's intentions. The answer to this question is the result of a succession of events that determines one's objectives in life. I have always been attracted by activities involving problem solving and critical thinking. I have found that learning and exchanging viewpoints is more than a mean to be an active society member but a life style. Knowledge acquisition not only makes me feel progressing but also self-satisfied. Later on, I discovered that I could keep this passion ignited throughout performing research.

I started a bachelor in applied mathematics. Once, my numerical analysis professor asked the class to take an extra FORTRAN programming course to implement algorithms we had learnt. It was challenging and worthwhile experience since programming helped me understand in depth the algorithms that I implemented and showed me the result of my work numerically and graphically. From that moment, my interest in this field have grown dramatically especially during my last year where most of the courses required programming. I became conscious of the wide range of problems computers may solve.

I decided to pursue my studies in computer science and I got enrolled in a Master in information science. I also chose artificial intelligence as a minor because I was intrigued about how AI works and what kind of non-conventional problems it can solve. When I took software courses, my view has been enlarged and I became more focused on what will be a suitable design, how to choose an appropriate architecture, and what qualities are needed and how to include them in the design? It's more than problem solving; it's the methodology that requires in depth analysis, innovation and imagination. In my third semester, professor Bensaid encouraged me to apply for TA position to teach an introductory computer lab course. This experience was demanding since I needed both to convey knowledge in pedagogical way and to captivate students' interest.

My research during my Master comprised document categorisation, prediction using fuzzy neural networks, and educational tools where I have implemented in Java a tool that enables teachers to generate graphical user interface and data storage without programming. I have separated the logic from GUI and data storage making the tool easily extendible to new areas of knowledge. It was an important project for my country since it was intended to promote long distance learning and teaching of disabled persons as well as strengthen student understanding.

During my work experience, I have been confronted to diverse technical challenges where a good software approach was key point. Large and complex projects, such as digital libraries and search engines, required profound understanding of problems and intensified discussions of solutions. Engineering and re-engineering was essential to surmount such problems.

As a researcher, I will have the opportunity to gain a deeper understanding of software engineering and re-engineering and enhance my knowledge in related fields. At the same time, I will have the pleasure to teach and benefit from interaction with research groups and faculty from whom I will receive guidance, interesting proposals, and constructive criticism. I would enjoy being an active member of the community by joining several scientific, cultural, and sportive activities.

I am confident that my determination, my love for learning, my strong computer science and mathematical background, my work experience, and my enthusiasm for teaching will lead me to succeed in my mission. I will be proud and delighted if I will accomplish my dream within your institution.