

# Vitae

Mahboub Ben Ahmed Baccouch was born in the beautiful city, Bouramli 2, of Medenine, in the south of Tunisia. He was raised in Medenine and received his high school diploma (Baccalauréat in Mathematics) in 1999 from the Lycée Secondaire 2 Mai 66 Medenine with honors then he joined the Preparatory Engineering School of Nabeul (Institut Préparatoire aux Etudes d'Ingénieurs de Nabeul: IPEIN), Tunisia. After taking a national exam for entry into engineering schools, Mahboub was one of the students to enter Tunisia Polytechnic School, EPT, the leading engineering school in Tunisia, in September 2001. These students are selected among the top 4 percent of the engineering student community. He spend a total of 3 years (junior level, senior level and first year graduate) in which he pursued a multi-disciplinary intensive engineering program with a combination of courses from mechanical, civil, electrical and industrial engineering followed by a specialization in one of the following options: (1) Mechanics and Structures, (2) Signal and Systems and (3) Scientific Management. The nature of the course-work at EPT is well balanced between theoretical and experimental courses in addition to practical design courses. The polytechnicians have the profile of highly-qualified engineers with a general technical background, liable to master and contribute to technology, to carry out big projects and lead the multi-disciplinary teams that these projects involve, in a word to assume important responsibilities in the scientific, industrial and economic. Students graduate with the equivalent of a Master of engineering degree. Engineering diplomas in Tunisia require 5 years of university education. Mahboub was majoring in Mechanics and Structures where he received the diploma from EPT in June 2004. During this academic year, he was also enrolled as a Master of Science student in Engineering Mathematics at EPT where he was ranked the first, which he earned in 2004 under the supervision of Prof. Slim Choura, Prof. Sami El-borgi and Prof. Ali Nayfeh. In August 2004, he decided to go to the home of the Hokies to work on a PhD program with the Mathematics Department. In 2005, he received his second Master of Science in Mathematics degree and at the same time was enrolled as Doctor of Philosophy Program in Mathematics at Virginia Tech. During the same period Mahboub worked as a Graduate Teaching Assistant (GTA) and as a Graduate Research Assistant (GRA) for the Math department. During his work, Mahboub has co-authored several conferences and international journal papers.

On Friday, February 22, 2008, Mahboub defended his PhD in Mathematics from Virginia Tech under the supervision of Prof. Slimane Adjerid. He plans to join the academia where

he will continue to work with people from a variety of different backgrounds including the DG finite element method. Mahboub highlighted a few of the initial research directions. These are starting points for exploration, and many interesting and unexpected research challenges are sure to arise during the process. He has collaborated and co-authored international papers with researchers in different areas of Mathematics and Mechanics from different Universities, hoping to grow this aspect of his research even further in the future. His research interests span several areas of Applied Mathematics: Numerical analysis, Numerical Methods, Scientific Computing, Computational Fluid Dynamics, Vibrations, Inverse Eigenvalue Problems, Mechanical and Civil engineering, and Mathematical Modeling. He is comfortable working in any of the above area. With a strong background in applied and computational mathematics, as well as a good background in computational mechanics, Mahboub also like to participate in multidisciplinary research in computational sciences and engineering. He is also interested in studying numerical solutions of PDEs using other higher order methods such as finite differences, finite volume schemes and spectral methods with broader application.