

## **Response Speech for Jordan Professorship**

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In the practice of my religious faith, there are three great gods. One of the fortuitous coincidences in my life is that in the practice of my profession, I have been connected to three great personalities in engineering education, Everitt, Jordan, and Van Valkenburg, by virtue of being a faculty member in the distinguished department of electrical and computer engineering. Yes, three great personalities, William L. Everitt, the “grandfather” of the department; Edward C. Jordan, the “father” of the department; and Mac E. Van Valkenburg, the “uncle.”

I am very grateful for the fortune of joining the department during the academic year 1965-66, in which Everitt was the dean of the college, Jordan was the department head in the first semester, and Van Valkenburg was the acting department head in the second semester, because Jordan was on sabbatical spending his time at Arecibo in Puerto Rico, working on the revision of his book for the second edition.

At the time, I did not have any inkling that one day in the distant future, namely, 39 years later, I would be standing in front of a distinguished gathering to be the first recipient of a professorship named after one of these three great personalities, Edward C. Jordan, as a result of the profound influence this noble individual has had on my long career here. But if there is one thing that I want this event to be remembered, it is not for the honor that is bestowed upon me, but for the honor that is bestowed on Professor Jordan himself, with the establishment of the professorship named after him.

My connection to Professor Jordan began long before I came to Illinois, while I was a student at the Madras Institute of Technology in India in the early 1950's, where one of the subjects I studied was electromagnetic theory, commonly known as EM Theory, or simply EM, using his classic 1950 book, “Electromagnetic Waves and Radiating Systems,” a copy of which I have here. You can see that this book is worn out and the color is faded, because of the age, about 50 years. But the beauty of the book is not in the condition of the book or the color of the paper. It is in its contents, which never wear out or fade away.

At the time, I did not at all appreciate the beauty of EM, generally considered to be a beast by the students, then and now, and I predict, in the future. Nor did I envision that at some point in my career, I would be inspired enough to expound the beauty of EM to my students and assure them of its relevance, on the first day of my classes in the classrooms of the Everitt Laboratory, housing the Jordan-built department, by constructing and reciting a PoEM:

To My Dear ECE 229 Student  
Whether by design or accident  
You might be wondering why you should study EM  
Okay, let me tell you about it by means of this PoEM  
First you should know that the beauty of EM  
Lies in the nature of its compact formalism  
Through a set of four wonderful EMantras  
Familiarly known as Maxwell's equations  
They might be like mere four lines of mathematics to you  
But in them lie a wealth of phenomena that surround you  
Based on them are numerous devices  
That provide you everyday services  
Without the principles of Maxwell's equations  
Surely we would all have been in the dark ages  
Because there would be no such thing as electrical power  
Nor would there be electronic communication or computer  
Which are typical of the important applications of ECE  
And so you see, EM is fundamental to the study of ECE  
Whether by design or accident  
My Dear ECE 229 Student.

But, of course, none of this would have happened if it were not for this “electromagnetic” personality attracting me to drive all the way from Seattle, Washington, to the corner of Green and Wright streets in September 1965 in our green 1955 Chevrolet Bel Air, with

my wife and two children and a third one in the mother's womb. Yes, all the way from Seattle, Washington, to the corner of Green and Wright streets, in a green car, never to turn back, never to regret having made that journey to the "Temple of Electrical Engineering, now Electrical and Computer Engineering," where the three great personalities were in residence, but only to remain here and serve with three D's: Dedication, Determination, and Devotion, listed in alphabetical order (but you can change the order anyway you like). What a difference one individual can make in your life!

So, with the inspiration provided by this individual, and with dedication, determination, and devotion, I have managed to write undergraduate textbooks on EM, the first book, BASIC ELECTROMAGNETICS WITH APPICATIONS, published in 1972, followed by the second book, ELEMENTS OF ENGINEERING ELECTROMAGNETICS, with the first edition published in 1977, and subsequent editions published in 1987, 1991, 1994, 2000, and the present sixth edition in 2004, which includes a page entitled, "A Tribute to Edward C. Jordan." I will read to you the first and last paragraphs.

The first paragraph says:

Just as one's personal life is influenced by others, most notably parents, one's professional life can be influenced by certain individuals. In some cases, the influence can be profound. Edward C. Jordan has had such profound influence on my long professional career at Illinois.

The second and third paragraphs are his biography. The last paragraph says:

I am deeply grateful for Professor Jordan's influence on my professional career, and I am immensely honored by my connection to him: To have studied from his classic 1950 textbook while a student in India in the 1950's; to have been a member of the faculty and the administration of the department built by this noble individual; to have authored textbooks on the same subject as that of his famous book; to be the first holder of the professorship named after this "father" of the department; and to pay tribute to this

individual of “electromagnetic” personality in this book on electromagnetics, the lead volume in the new Illinois ECE Series.

I conclude with this short poem:

To Edward C. Jordan, the “father” of my department  
Fifty years ago, I may have studied EM from your book with much bewilderment  
But today, I offer to you this book on EM which I wrote with much excitement  
In appreciation of your profound influence on my professional advancement.

I will later hand over the book to his widow, Kay Egbert Jordan, and another copy to his son, Robert Jordan. Thank you.