

Application Form
2006-07 TWRI Mills Scholarship Program

1. Name of Student and TAMU Student ID Number.

Zach Vernon

2. Name and Contact Information for Faculty Advisor or Committee Chair.

Dr. Raghavan Srinivasan
r-srinivasan@tamu.edu
979-845-5069

3. Description of the student's proposed research, emphasizing how it will address a water resources-related concern (one page or less).

I am entering graduate school through the Texas A&M Department of Forest Science beginning in the Fall of 2006. As of yet, I do not know the title of my thesis or the exact topic that I will research. Rather, I know the general goals that I have for my graduate education, as well as several potential research topics. My primary goal during my graduate studies is to increase my aptitude in the use of remote sensing and GIS for environmental decision-making, especially as related to managing natural resources for multiple, sustainable uses. I feel that pursuing my M.S. through the Department of Forest Science will allow me to increase my knowledge of ecosystem structure and functions while also providing me the opportunity to improve my skills in advanced GIS analysis. My interest in natural resource management encompasses many areas and is not limited to a specific aspect of ecosystem or forest science.

Rather, I am more interested the inter-relationships between all involved variables, including both those that are natural and those related to human populations. I am especially interested in the fields of landscape ecology and environmental modeling, both of which rely heavily on a working knowledge of hydrologic processes. Water-related concerns are certainly a big part of sustainable resource management, and I will undoubtedly address some of these concerns in my graduate research. I want to look at the "big picture" of environmental problems using GIS and remote sensing applications, using quantitative inputs to come up with the best possible management plans. As of yet, my interests are not limited to a specific ecological system for these sorts of applications, be it rangelands, forests, wetlands, etc. Certainly, I would like to pursue a thesis focused on a single one of these settings, and one of my primary goals during my first semester is to determine which ecological system interests me the most.

4. Proposed use of funds resulting from this Scholarship (for example, to pay tuition, conduct research, etc.). One to two paragraphs or less.

The scholarship funds will be used to pay for academic expenses other than tuition, such as books. It may also be used to obtain materials related to my research.

5. Intended career path the student anticipates pursuing. (One to two paragraphs or less).

After experiencing the research environment at the Texas A&M Spatial Sciences Lab, I can say for certain that my future career goals include working as a GIS analyst in a field related to natural resource management. Resource management improves dramatically when these technologies are implemented, and I feel that the best way to improve the condition of the environment is through the widespread use of these technologies. I want to work as a GIS analyst so that I can solve environmental problems using the best possible information and methods.