

presents MS Computer Science THESIS DEFENSE

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GIS tool for Nuclear Fuel and Tidal Resources

Abstract

Most of the world even today uses coal and petroleum as the main sources of energy. But over the last few decades, many alternative sources of energy have been discovered and their use is on the rise. A few of the alternative sources of energy include solar energy, nuclear energy, wind energy, tidal energy, bio fuels, natural gas and hydrogen.

The motivation for this thesis is to make use of GIS software, as an innovative approach, to map a couple of these fuel resources worldwide. We will be focusing on nuclear and tidal energy in this case. Mapping of the nuclear energy facilities as well as the tidal energy generation facilities using the GIS tool, gives us a visual representation of how the energy production trends are changing. Learning about these changes in energy generation becomes very visual and interesting via images, fact sheets and videos.

Thesis Committee

Carl Eckberg, Thesis Chair, Department of Computer Science Roger, Department of Computer Science Usha Sinha, Department of Physics