

I first heard about modeling in the internet. To be honest, I have never had a modeling class before because it is not offered in my field. The only reason that I look about modeling in the internet is because I have some interest on it. Indeed, I think modeling skill is very important for students in field of science and engineering. Throughout students' studies and future career as a scientist or engineer, they will face a lot of tasks where they need modeling skills. I am a fourth year renewable energy engineering student at the University of Antananarivo so I am very interested in this modeling workshop. In my field, modeling is used in different kind of simulations, for instance, it is used to forecast the electricity consumptions in a particular place throughout the year or to simulate and assess the environmental impact of any type of energies. Therefore, modeling is an important part of our studies. To be more specific, I am interested in modeling the environmental impact of the use of any type of energies. For this workshop, I decided to focus on the environmental impact of the use of charcoal for cooking as the large majority of Malagasy people still use this type of energy. My future plan is to have an environmental impact assessment of all the energy used in Madagascar so this workshop will help me to get started in the field of environmental impact of energies

Moreover, as modeling is an important part of any kind of simulations, attending this workshop will make my simulation skills grow. It will allow me to explore more topics and fields that requires modeling skills in the future. Therefore, being part of this workshop will help me to get an introduction to modeling.

In addition, I am planning on going to post-graduate studies in the future where I will conduct different kind of research that will require modeling skills. This modeling class will give me the needed skill that I will use to get prepared for post-graduate studies.

This workshop will be a big opportunity to learn modeling in a more practical way. In fact, as I already know and have some data about the topic of our research, we can practice straight away everything that I learn about modeling.

Finally, this workshop will be an opportunity to make some network with scientist from different background in a beautiful campus such as Valbio in Ranomafana. I have so many interest in attending this workshop, so, if accepted, I will do everything I can to achieve what is expected from me.

Abstract

90% of the energy used for cooking in Madagascar are from charcoal which means that every year hectares of forest disappeared in Madagascar to meet this demand. Also, every day, a significant amount of carbon oxide are being released in the air from the making process of charcoals and the burning of charcoal for cooking. Therefore, the purpose of this research is to show the environmental impact of the carbon emission from the use of wood and charcoal in indoor cooking in Madagascar. Two parameters will be studied, first the surface of forest that were cut for charcoal purposes in Madagascar. Second, the amount of carbon released in the atmosphere from the use of charcoal and wood for cooking in a Malagasy context. Thus, these two parameters will be added in a model to get a result. The result will after allow to measure the environmental impact of the use of charcoal as a primary source of energy in Madagascar. The data in this research will help in setting the future regulations of the use of charcoal and in getting more attention on the emergency need to use more alternative sources of energy.

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EDUCATIONS:

2014-2017 : Licence de l'ingénierie en énergie renouvelable, University of Antananarivo.

PROFESSIONAL EXPERIENCES :

March - July 2017: Internship on microgrid system at the Energy Institute of Colorado State University USA.

November 2016: Internship on bio-digester system at NGO FaFaFi Fianaranstoa.

LANGUAGES:

Malagasy: mother tongue

French: proficient

English: proficient

SOFTWARE:

Matlab, arduino, circuit maker, Proteus.

COMPUTER LANGUAGES:

C, Python (basic).

INTERESTS:

- Volunteer at Operation Smile Madagascar
- Member of Groupe de Réflexion sur l'Energie (GRE)

HOBBIES:

- Football.
- Music.
- Hiking