Outputs/publications

Publications:

Optimising Boolean Synthetic Regulatory Networks to Control Cell States, Nadia Taou; Michael Lone, IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2020

In this paper, we consider the idea of using a synthetic regulatory network as a closed-loop controller that can control and respond to the dynamics of a cell's native regulatory network in situ. We explore this idea using a computational model in which both native and synthetic regulatory networks are represented by Boolean networks. We then use an evolutionary algorithm to optimise both the structure and parameters of the synthetic Boolean network.

Lyell/EBS Newsletter (published in 2020): **Modelling sustainable land uses at the landscape-scale in the Colombian Amazon region**

Research outputs and papers in preparation

Preprint: paper about deforestation in Colombian Amazon rainforest. (this paper is not published yet)

In this paper we built a socio-economical model, based on data field and environmental data to evaluate the efficacity of agroforestry programs to stop deforestation. We will present results and recommendations.

Another paper is about the impact of deforestation on biodiversity (in preparation and not publish yet)

SINCHI/WHU Online workshop July 2020