Charla: *Democratization of AI through evolution and learning how to learn*

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Martes 12 de Julio, 5:00 pm (UCT-6)

Enlace para Zoom
https://udecr.zoom.us/j/83243492562?pwd=B5EPZ0PBJ3eDJailJeCG4eE6lfB8o3.1

Summary

Problem: The need and utility of AI is outpacing the quantity of expertise needed to implement it. Many people possess expertise in their domain and recognize how this expertise could be automated or expanded to gain greater insight using ml methods. However, AI and machine learning itself is an amalgamation of computer science, data science, statistics, and engineering. How do we automate our expertise so that you can automate yours?

Solution: We create a platform that distills building AI to a few clicks on the front end and an AI in the backend that is constantly learning the best methods to build these AI's. Using neuro evolution, we create meta learners and just learners that require the absolute minimum input from the user and can generate solutions scaled to the user's needs.

Conclusion: In this talk, we will describe the current state of neural networks and their capabilities and limitations. We present a brief overview of evolutionary algorithms and how they solve some of the limitations. Finally, we will dig into how we stack our evolutionary algorithms to create embedded meta learners.

Reseña biográfica de los charlistas

Dr. Steven Cogill
Dr. Steven Cogill currently holds a dual appointment at the US Department of Veteran Affairs and Stanford University, and he is the founder and CEO of Kesho-AI. Dr. Steven Cogill earned his PhD in Genetics with a bioinformatics focus from Clemson University in 2016. He also has a master's degree in biochemistry from Indiana University. He has successfully transitioned from bench to computational science. He has worked in improving patient outcomes through the application of data mining with machine learning both at the macro and molecular level. Currently, he is involved in prediction of rare events through patient history analysis, broad and personalized epigenomic responses to inflammatory stimuli, rapid bacterial identification assay, and improving machine learning approaches with small high dimensional datasets.

Dr. Jose Guevara-Coto
Dr. Jose Guevara-Coto got his PhD in Genetics at Clemson University in 2017, with his work focusing in bioinformatics and genomic data analysis. His also has a bachelor's degree in Biotechnology from the Costa Rica Institute of Technology (ITCR). He was a professor at the University of Costa Rica from 2018 until 2021, working at the Biology Department and then in the Computer Sciences Department. He has built collaborations with both academia and industry, working with multi-omics datasets from patients to help develop accurate diagnostic approaches. His research has focused on how both statistical and machine learning methods can be used to improve our knowledge and apply it in translational medicine. Dr. Guevara is a scientific consultant at Kesho-AI.