

Contributions to the industry

[Eric Solano, Ph.D.](#)

In the future I am planning to keep using Artificial Intelligence, Machine Learning and Big Data to help find [sustainable business strategies](#) in the context of the Triple Bottom Line concept, for efficient processes and optimal systemic approaches to increase revenue, while measuring [environmental](#) and [social impacts](#). I will keep publishing papers related to big data and modern analytical tools such as Large Language Models (LLM) and Generative Pre-trained Transformers (GPT). I am planning to explore interesting use cases beneficial to the manufacturing industry or any other industry I may be working for in the future.

At [Continental](#), I enjoy mentoring young and aspiring data scientists from undergraduate and graduate programs. I have received praise from my students, mentees, and from managers and executives regarding my dedication, passion and commitment to mentorship. I will continue this mentorship role as much as possible in all available programs at Continental.

Continental has a program called “[IT Graduate Program](#)”, where recently graduated employees spend two years doing six-month rotations in four different IT departments. I have mentored aspiring data scientists who want to learn more about big data and machine learning. One of these students decided to join our team.

Another program at Continental in Europe is called “Ready for Conti” where Continental sponsors a student to spend some time and resources at the manufacturing plants working in an IT related project. They have the option to select a more challenging task and write a thesis required for their degree. I recently sponsored a student at the [University of Zilina](#) in Slovakia to work with big data from our manufacturing plant in [Puchov, Slovakia](#). Under my supervision, he used big data technology including an Amazon EMR cluster, Amazon S3, [Apache parquet](#), Apache Spark, Scala language, etc., to analyze data and prepare and defend his [thesis](#) successfully.

In 2024, I am supervising a master’s student from the [Data Science Program](#) at the University of North Carolina Charlotte ([UNCC](#)). The student is analyzing large amounts of free text data from Continental sales force about our sell-in customers (tire distributors and retailers). The student will be using cloud-based technologies to perform Natural Language Processing techniques to extract customer intelligence from the data. I will mentor him in the use of NLP methodologies such as sentiment analysis, topic modeling, language translation, etc., and tools like pyTorch, Deep Learning, Transformers, Large Language Models, etc.