**WORKSHOP 3**

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**DESARROLLO**

1. **Tesauros**

CNN, Convolutional neural networks, Deep neural networks, inference, Prunning

1. **Preguntas**

¿Qué tan confiables son las redes neuronales convolucionales?

¿Qué métricas de confiabilidad se pueden aplicar en la inferencia de una red neuronal convolucional?

¿Cómo se pueden implementar estas métricas en la inferencia y que tan viables son al ponerlas en práctica?

**Ecuaciones de Búsqueda**

Metrics reliability assessment software

Evaluating the Reliability of Convolutional Neural Networks

Métricas de confiabilidad implementadas en la inferencia

métricas de confiabilidad AND redes neuronales convolucionales

What are reliability metrics OR convolutional neural networks

inferencias AND redes neuronales convolucionales

reliability metrics in neural networks

fault detection in neural networks in python

1. **Búsqueda de Bases de datos**

GOOGLE SCHOOLAR, SCOPUS, IEEE

**7) Gestor Bibliográfico**

IEEE Staff, *2019 IEEE Latin American Test Symposium (LATS)*. IEEE, 2019.

Y. Ibrahim, H. Wang, and K. Adam, “Analyzing the Reliability of Convolutional Neural Networks on GPUs: GoogLeNet as a Case Study,” in *2020 International Conference on Computing and Information Technology, ICCIT 2020*, Institute of Electrical and Electronics Engineers Inc., Sep. 2020. doi: 10.1109/ICCIT-144147971.2020.9213804.

A. Mahmoud *et al.*, “Optimizing Selective Protection for CNN Resilience.”

C. H. Skqquin and R. D. Clay, “FAULT TOLERANCE IN ARTIFICIAL NEURAL NETWORKS.”

A. Ruospo, E. Sanchez, M. Traiola, I. O’Connor, and A. Bosio, “Investigating data representation for efficient and reliable Convolutional Neural Networks,” *Microprocess Microsyst*, vol. 86, Oct. 2021, doi: 10.1016/j.micpro.2021.104318.

K. Shibata, K. Rinsaka, and T. Dohi, “M-SRAT: Metrics-based Software Reliability Assessment Tool,” 2015.

K. Adam, I. I. Mohd, and Y. M. Younis, “The impact of the soft errors in convolutional neural network on GPUS: Alexnet as case study,” in *Procedia Computer Science*, Elsevier B.V., 2021, pp. 89–94. doi: 10.1016/j.procs.2021.02.012.

A. Ruospo, A. Bosio, A. Ianne, and E. Sanchez, “Evaluating Convolutional Neural Networks Reliability depending on their Data Representation,” in *Proceedings - Euromicro Conference on Digital System Design, DSD 2020*, Institute of Electrical and Electronics Engineers Inc., Aug. 2020, pp. 672–679. doi: 10.1109/DSD51259.2020.00109.

G. Kaur and K. Bahl, “Software Reliability, Metrics, Reliability Improvement Using Agile Process,” 2014. [Online]. Available: www.ijiset.com

L. Rosenberg, T. Hammer, J. Shaw, and L. Rosenberg@gsfc, “SOFTWARE METRICS AND RELIABILITY.”