

Lawrence Roman Quizon

Master's Student | Aspiring Neuromorphic Engineer

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Philippines

Contact

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Web & Git

lawrence-lugs.github.io
github.com/
lawrence-lugs

Skills

IC Design

Cadence Virtuoso
Synopsys, Vivado,
MAGIC, ngspice

Programming

C/C++, Python, Verilog,
Verilog-A, MATLAB

Knowledge in Topics

Neuromorphic
Engineering
Magnetic Devices and
Simulations

Languages

English, Filipino
Basic Korean
Basic Japanese

Education

August - Present
2021

M.S. Electrical Engineering (exp. Dec 2023)
Advisor: Anastacia Alvarez
Electrical and Electronics Engineering Institute
University of the Philippines, Diliman

June - June
2015 2021

B.S. in Computer Engineering
Magna Cum Laude
Electrical and Electronics Engineering Institute
University of the Philippines, Diliman

Research Interests

Neuromorphic Engineering and Neuroscience

Interested in computational paradigms and hardware inspired by neural mechanisms in humans or other animals and in the co-development of models and explanations for neural mechanisms from effective engineering models.

Magnetic Devices and Computing

Interested in the use of magnetic devices for memory (domain wall devices, tunnel junctions) and computing (coupled oscillators, crossbar computation)

Work Experience

August - Present
2021

University of the Philippines

Taught courses about basic amplifier circuits, semiconductor device fundamentals, basic digital design, and assisted in the advising of undergraduate thesis students.

June - July
2019 2021

Maxim Integrated

Electrical and Electronics Engineering Institute
University of the Philippines, Diliman

Training

IEEE CASS Domain Specific
Accelerator Architectures

Brain Inspired Computing:
Physics, Architectures,
Materials and Applications

Publications

ICECS 2022 - International Conference on Electronic Circuits and Systems

L. R. A. Quizon, M. D. Rosales, A. B. Alvarez, "Small-Dictionary LCA Sparse Coding for Low-Power Pattern Recognition in Edge Devices", Submitted Paper for Review

ISOC 2021 - International SoC Design Conference

L. R. A. Quizon, A. B. Alvarez, C. G. Santos, M. D. Rosales, J. R. E. Hizon, and M. P. R. G. Sabino, "A Voltage-Controlled Magnetic Anisotropy based True Random Number Generator," IEEE Xplore, Oct. 01, 2021.

<https://ieeexplore.ieee.org/abstract/document/9613854/>

References

(to ask)