Afolabi Ige

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Education

PHD | GEORGIA INSTITUTE OF TECHNOLOGY | ECE | JAN '22 - PRESENT

Research - Floating gate chip design for analog computing and mixed signal applications.

M.S | GEORGIA INSTITUTE OF TECHNOLOGY | ECE | AUG '20 - DEC' 21

Coursework - Digital design and VLSI

B.SC | LOUISIANA STATE UNIVERSITY | MAY 2020

Double Major - Electrical Engineering and Computer Science

Publications

- J. Hasler; P. Ayyappan; **A. Ige**; P. Mathews "A 130nm CMOS Programmable Analog Standard Cell Library". Transactions on Circuits and Systems I: Regular Papers. – Accepted, Second Revision.
- **A. Ige** and J. Hasler, "Efficient implementation of a fully analog neural network on a reconfigurable platform," in 2023 IEEE 66th International Midwest Symposium on Circuits and Systems (MWSCAS).
- **Ige, A.;** Yang, L.; Yang, H.; Hasler, J.; Hao, C. "Analog System High-Level Synthesis for Energy-Efficient Reconfigurable Computing." J. Low Power Electron. Appl. 2023, 13, 58.

Work Experience

DIGITAL DESIGN HARDWARE ENGINEER INTERN | APPLE | MAY – AUG 2021

- Converted the DFT-DV testbench to a simulator agnostic design by implementing another Verilog simulator.
- Implemented new testbench features at request of DV methodology team.

SOFTWARE DEVELOPMENT ENGINEER INTERN | AMAZON | YEAR 1 AND 2

Remote Work | Year 2 | June – August 2020

- Implemented an Audit trail into a massive customer facing application and worked across the full stack.
- This required setting up a new data store, creating backend functions, creating an internal API, working with many AWS resources, and pulling information from the API to display with typescript on a React website.

Seattle, WA | Year 1 | June – August 2019

- Built metric dashboard from scratch in React with Elastic Search as a data store.
- Setup a data pipeline that used an internal wrapper on Elastic Map Reduce to aggregate billions of records and write to Kinesis FireHose which funneled into Elastic search.

SOFTWARE ENGINEERING INTERN | CHEVRON | YEAR 1 AND 2

San Ramon, CA | Year 2 | May – August 2018

- Automated CI/CD deployment process to Dev, QA and Prod servers using the Jenkins tool.
- Implemented and enhanced automated maintenance scripts for over 30+ servers.

Houston, TX | Year 1 | June – August 2017

- Analyzed 30+ applications on site to extract interface patterns and create a cloud deployment plan that avoided downtime.

Other Research Projects

TAPEOUT EFFORTS | GATECH | FALL 2021 – SUMMER 2023

- 130nm: Created a charge pump, scan chain, designed static DAC architectures and the FG switching architecture as contributions to an acoustic classifier project and 130nm standard cell library.
- 65nm: Led a team of graduate students to two tape-out runs building systems like Hopfield networks, Arbitrary waveform generators and various one layer classifier structures.
- 180nm: Led a team of graduate students in designing and synthesizing analog standard cells for characterizing the process for floating gate programming.