

ILAYDA YAMAN

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EDUCATION

Lund University PhD student in Electrical Engineering with a focus on Integrated Electronic Systems	<i>03/2021 - current</i>
Lund University Master's Degree - Embedded Electronics Engineering	<i>09/2018 - 06/2020</i>
Istanbul Technical University Bachelor's Degree - Electronics and Communication Engineering	<i>09/2014 - 06/2018</i> GPA: 3.13/4.00
University of Waterloo Exchange Program	<i>06/2015 - 08/2015</i>
TED Ankara College High School	<i>09/2009 - 06/2013</i> GPA: 86.82/100

PROJECTS

- Master's Thesis - A Hardware Accelerated Low Power DSP for RNNs *08/2019-06/2020*
 - Implementation of a Recurrent Neural Network model by designing a Digital Signal Processor (DSP) with a hardware accelerator for power efficient and flexible system.
 - Tensilica Customizable Processor realized in 28nm technology.
- Integrated Circuits Design Course Projects *02/2019-07/2019*
 - Designed an ASIC for Matrix Multiplications in Cadence 65nm technology.
 - Designed and implemented a pipelined radix-2 FFT circuit with SDF architecture for 2048 points as an ASIC in Cadence 65nm technology.
- Competition Project - FPGA Based Sign Language Interpretation Using Convolutional Neural Networks *01/2018-08/2018*
 - Implemented a Convolutional Neural Network on ZedBoard Zynq™-7000 Development Board for “Sign Language Interpretation” using Xilinx Vivado and SDK. Project was selected as a finalist in “Xilinx Open Hardware Competition - 2018”.
- Bachelor's Thesis - Implementation of NIST Tests on a Chaotic Random Number Generator inside a System on Chip *05/2017-08/2018*
 - Designed a custom IP was in Xilinx Vivado Design Suite for random number generation and Linux Operating System was booted in the system to run NIST Tests.
- Microprocessor System Design Lecture Project - Tetris Game *02/2018-06/2018*
 - Design and implementation of a simple platform to play Tetris game on a “Digilent Nexys 2 FPGA” with the help of a soft microprocessor, PicoBlaze, and a VGA unit.

PUBLICATIONS AND MANUSCRIPTS

1. Yaman, I., Tian, G., Larsson, M., Persson, P., Sandra, M., Dürr, A., Tegler, E., Challa, N., Garde, H., Tufvesson, F. and Åström, K. (2023). The LuViRA Dataset: Measurement Description. arXiv preprint arXiv:2302.05309.
2. Tian, G., Yaman, I., Sandra, M., Cai, X., Liu, L. and Tufvesson, F. (2023). High-Precision Machine-Learning Based Indoor Localization with Massive MIMO System. arXiv preprint arXiv:2303.03743.
3. I. Yaman, A. Andersen, L. Ferreira and J. Rodrigues (2021). FLoPAD-GRU: A Flexible, Low Power, Accelerated DSP for Gated Recurrent Unit Neural Network. *34th SBC/SBMicro/IEEE/ACM Symposium on Integrated Circuits and Systems Design (SBCCI)*.
4. L. Akçay, E. Çil, A. Vardar, I. Yaman, R. Yeniçeri and M. E. Yalçın (2018). Implementation of a chaotic time-delay RNG based secure communication system on FPGA. *10th International Conference on Electrical and Electronics Engineering (ELECO)*.

EXPERIENCE

PhD student, Project Consultant and Teaching Assistant in Lund University

07/2020 - current

Lund, Sweden

- Teaching the “Digital IC Design”, “Introduction to Structured VLSI Design”, “DSP Design”, “IC Project” and “Computer Architecture” courses.
- Student representative in Research Programmes Board of LTH

Supplemental Instructor (SI) Leader

08/2019 - 11/2019

Lund, Sweden

- SI leader of the course “Digital IC Design”.

Summer Intern in Anka Microelectronics Systems

06/2017 - 07/2017

Istanbul, Turkey

- Verilog and FPGAs.
- Worked with ModelSim and Questa Simulators.
- Assisted trainings given by the company.

SCHOLARSHIPS AND AWARDS

- Lund University Global Scholarship

OTHER CERTIFICATIONS

- IELTS Score: 7.5 Overall Band Score in March 2018
- Goethe-Zertifikat B1
- International Baccalaureate (IB) Diploma in June 2014