ALON AMID

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https://people.eecs.berkeley.edu/~alonamid/
Ph.D Candidate in Electrical Engineering and Computer Sciences

EDUCATION

University of California, Berkeley *2016-Present*
Ph.D Candidate in Electrical Engineering and Computer Sciences, Graduate Student Researcher
-Research area in computer architecture and engineering: energy efficient data-parallel architectures for sparse and dense applications (including machine learning), architectures for heterogeneous and distributed systems, RISC-V systems, and design methodologies for the aforementioned topics
-Affiliated with the ASPIRE Lab, ADEPT Lab, and the Berkeley Wireless Research Center
-Demetri Angelakos Memorial Achievement Award (2020-2021).
-Service/Leadership: Treasurer (2 years) and President (1 year) of the Electrical Engineering Graduate Student Association. EECS Delegate to the UC Berkeley Graduate Assembly

University of California, Berkeley *Graduated 2019*
M.Sc. in Electrical Engineering and Computer Sciences
-Thesis topic: Nested-Parallelism PageRank on RISC-V Vector Multi-Processors

Technion - Israel Institute of Technology *Graduated 2016*
B.Sc. in Electrical Engineering
-Graduated Cum-Laude. Overall GPA: 92.5
-Student Exchange semester in the University of Melbourne (Australia)
-Undergraduate research project on clock-power consumption analysis and optimization of GALS partitioned SoC architectures in the VLSI Systems Research Center

Hebrew Reali School of Haifa *Graduated 2007*
High School Diploma
-Graduated with Top Honors and Ministry of Education Technological Diploma
-Full Bagrut Diploma - Israeli matriculation certificate (43 credit points). Overall GPA: 96.9

EXPERIENCE

Microsoft Corp. May 2020 - August 2020
Research Intern *Redmond, Washington (Remote)*

Microsoft Azure AI and Advanced Architectures.
Cloud-hosted FPGA acceleration for data analytics systems.

Google LLC May 2018 - August 2018
Software Engineering Intern *Sunnyvale, California*

Google Cloud data-center platforms.
Far-memory latency analysis and mitigation using machine-learning based prediction.

Qualcomm Inc. 2015 - 2016
PHY ASIC Digital Design Engineer *Haifa, Israel*

Digital hardware design of Wi-Fi IEEE 802.11ad (WiGig) physical layer (PHY). High rate multi Gbps wireless communication chipset in the 60 GHz frequency band.
Involvement in every stage of PHY development cycle - including RTL implementations of Matlab algorithms, design of generic DSP modules and functions, configurable debug features, environment setups and stub implementations for RTL and Matlab 1x1 bit-exact verification.

Infosys Ltd. July 2013 - September 2013
Research Intern *Bangalore, India*

Infosys Instep Global Internship Program in Bangalore, India. Work in a large enterprise multi-cultural international environment.

Hybrid Access Control Based Solution for Cloud Services research project in Infosys Labs - the R&D unit of Infosys Ltd. Project involved designing a new access control model and applying it using Cipher-text Policy Attribute-Based Encryption (CP-ABE).

Elite Intelligence and Technology Unit - IDF (Israel Defense Forces) 2008-2012
Military Service - Officer *Israel*

2011-2012: Intelligence Staff Officer - strategic planning, analysis and product development of large scale and long term intelligence technology projects. Coordination with organizations across the IDF.

2009-2011: Intelligence System Officer - Responsibility for an operational intelligence analysis system, including characterization for future development and implementation. Commander of a team in charge of developing automatic intelligence analysis processes in the system.

Courses: Officers course, Project Management course, Data Communication course.

Honorable discharge as a lieutenant.

B.M. Carmel Ltd. 2007-2008
Network Administrator *Nesher, Israel*

Small business network administration, including "Priority" ERP system support and administration.

New overseas facility computer network set-up and ERP training in Bennington, VT.

TEACHING

EE290-2 - Hardware for Machine Learning Spring 2020
Graduate Student Instructor *University of California, Berkeley*

Content development and project advising for the inaugural offering of a graduate-level course

Three hands-on labs: DNN model quantization, design of a systolic-array accelerator in Verilog (with integration into a RISC-V SoC), and software optimization and scheduling for the accelerator.

`https://inst.eecs.berkeley.edu/~ee290-2/sp20/`

CS162 - Operating Systems and System Programming Fall 2018
Graduate Student Instructor *University of California, Berkeley*

Lead discussion sections and project advising for an upper-division undergraduate course.

`https://inst.eecs.berkeley.edu/~cs162/fa18/`

Madatech - Israel National Museum of Science 2004-2007
Science Youth Guide *Haifa, Israel*

Explanation of scientific exhibits and instruction of youth activities in the museum.

OTHER

Academic Interests	Computer Architecture, Parallel Computing, Energy Efficient Computing, Distributed Systems, Specialized Accelerator Design, Design Methodology and Automation, Machine Learning, RISC-V
Computer Languages	C, C++, Python, Matlab, R, Verilog, VHDL, CUDA, Bash, SQL, RISC-V Assembly, Scala, Chisel/FIRRTL Basic Proficiency: Perl, Java, VB .NET, Pascal, Prolog
Languages	Hebrew (Native), English (Native)
Cross-Cultural Experience	Visited over 45 countries across 6 continents
Music	Trumpet playing in the Technion Symphony Orchestra, Haifa Youth Wind Orchestra, and Anderson High School Band.