Alp Eren Kıyak

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Professional Summary	
M.Sc. student in Electronics Engineering at Istanbul Technical University with a strong interest in embedded systems, high performance computing and computer architecture. Demonstrated leadership as a team captain and equipped with solid technical skills in Verilog, SystemVerilog, and C/C++.	
Experience	
Research Assistant, Beykoz University – Istanbul, Turkey • Supporting faculty in laboratory instruction and student project supervision	Mar 2025 – present
 Undergraduate Research Assistant, Istanbul Technical University – Istanbul, Turkey Supported students in embedded systems and computer architecture graduation projects Teaching assistant for "Introduction to Embedded Systems" (EHB 326E) Designed assignments and final projects; provided feedback and tutoring 	July 2024 – Jan 2025
 Student Researcher, TUBITAK – Kocaeli, Turkey Researched PCIe 4.0 transaction layer Designed interface between FPGA and PCIe IP 	Jan 2024 – May 2024
 Student Researcher, Tera Microelectronics – Istanbul, Turkey Designed communication protocols (I2C, UART, PCIe) for analog chips Developed synthesizable FSMs; gained experience with Cadence tools and PCIe specs 	Sept 2023 – Jan 2024
 Student Researcher, TUBITAK – Kocaeli, Turkey Designed RV32IV Vector Load Store Unit Developed SDHD Host Driver and worked with AXI & Wishbone protocols 	Jan 2023 – Sept 2023
Education	
Istanbul Technical University (İTÜ), MSc in Electronics Engineering – Istanbul, Turkey	Feb 2025 – present
 Istanbul Technical University (İTÜ), BSc in Electronics & Communication Engineering Istanbul, Turkey Thesis: Implementation of Active Shield on PULPissimo Mate ROV International, 3rd Place (2021 & 2022) 	Jan 2018 – Feb 2025
Languages	
English: C1	
Turkish: Native speaker	
Skills	
Technical: Verilog, SystemVerilog, C/C++, Python	

Tools: Vivado, Quartus