

FURKAN YIGIT AKYILDIZ

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617-971-7975
Providence, RI

SUMMARY

Strong background in semiconductor design and verification in Space & Defense industry and academic experience in Electrical-Electronics Engineering as a Teaching Assistant.

EDUCATION

Boston University, Boston, MA

Master of Science in Project Management

Baskent University, Ankara, TURKEY

Bachelor of Science in Electrical-Electronics Engineering

WORK APPOINTMENTS

Design Verification Engineer, 01/2025 to now

Purdue System-on-Chip Extension Technologies, West Lafayette, IN (Hybrid)

- Creating UVM testbench infrastructure from scratch
- Mentoring and teaching about UVM objects and components
- Coding in UVM & SystemVerilog to create Verification IPs
- Designing RISC-V based RTL design modules in SystemVerilog
- Developing verification components in UVM & SystemVerilog to stress RISC-V based RTL design modules
- The corresponding work can be found at <https://github.com/sudohdl>

Design Verification Engineer, 04/2022 to 08/2024

STG Engineering, Ankara, TURKEY (On-site)

- Identifying test plans from a requirement document of safety critical DAL-A projects (TAI KAAN)
- Designing high-speed I/O interfaces such as LVDS channels in UVM
- Coding in UVM to develop testbenches, sequences, and agents regarding the Avionic Digital Video Bus protocol
- Implementing SystemVerilog Assertions (SVA) for functional verification (LVDS channel timings)
- Integrating Synopsys VIP DDR3 to model block-level verification environment
- Programming in script languages such as TCL and Python to ease the simulation environment
- Performing design and verification activities in Rocky Linux Environment
- Maintaining the files via Git source control

ACADEMIC APPOINTMENTS

Research Engineer, 09/2019 to 12/2020

Boston University Metropolitan College, Boston, MA (Remote)

- Developing a mobile application called "Aloha"
- Coding the app using Swift programming language
- Organizing scope, schedule, cost, quality, and risk & cost management
- Cooperating with Prof. Barry Unger to handle customer and consumer needs

Teaching Assistant, 09/2018 to 09/2019

Boston University College of Engineering, Boston, MA (On-site)

- Teaching Assistant for Introduction of Electronics (EC410) and Power Electronics (EC583) courses with Prof. Mark Horenstein
- Assisting and mentored students with their class and lab work
- Grading students' homework and laboratory through the use of advanced Matlab & Spice programs and oscilloscope
- Conducting the Lab of Introduction of Electronics (EC410) and Power Electronics (EC583) classes

SKILLS

- **Programming Languages:** C, VHDL, SystemVerilog, UVM, SVA, TCL, Shell, Python
- **Simulation Tools:** Synopsys VCS, Modelsim