Hao Xue

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SUMMARY

Research & Industry Experience:

6-year industry experience as a hardware verification engineer mainly focusing on ***formal verification*** (4 years);

4-year college teaching experience (2-year as Teaching Assistant to teach labs, 2-year as Adjunct Faculty to teach course & lab);

6-year graduate research experience in ***hardware security***, ***VLSI design optimization*** (published 7 journal papers and 6 conference proceedings).

Programming: Verilog, VHDL, SystemVerilog, PSL, Tcl, Python, Shell.

Tools: Cadence Virtuoso/JasperGold, Synopsys VCS/PrimePower/TetraMax, Ansys PowerArtist, OneSpin, Xilinx Vivado.

Version Control: SVN, Git.

EDUCATION

Wright State University, Dayton, OH

- **Ph.D.**, Engineering, 2018 (Graduate Student Excellence Awards)
  - Dissertation: *Hardware Security and VLSI Design Optimization*
- **M.S.Egr.**, Electrical Engineering, 2013
  - Thesis: *Timing and Power Optimization using Mixed-Dynamic-Static CMOS*

WORK EXPERIENCE

Intel Corporation   Portland, OR
Formal Verification Engineer   01.2022 – Present

- Hands-on experience on verification plan, tests, debug, coverage analysis and project execution.
- Apply Formal Methods Techniques for verifying algorithms, protocols and their RTL implementations in domains such as Caches, Mesh, PCIe etc.

Wright State University, Department of Electrical Engineering   Dayton, OH
Adjunct Faculty (part-time)   01.2019 – 04.2022

- Create/teach course/lab: IC Hardware Security & Trust.

Edaptive Computing Inc   Dayton, OH
Digital Verification Engineer   09.2018 – 12.2021

- Hardware verification using side-channel analysis, formal verification, etc.

SERVICE

Military Service   09.2015 – 09.2021
U.S. Army Reserve, Unit Supply Specialist   Cincinnati, OH

- Maintain automated supply system for accounting of organizational and installation supplies and equipment.

Professional Service

- Reviewer, *IEEE Transactions on Components, Packaging, and Manufacturing Technology*
- Reviewer, *International Journal of Electronics.*
- Reviewer, *IEEE Transactions on Very Large Scale Integration Systems.*
- Reviewer, *Microelectronics Journal.*
- Reviewer, *IEEE Letters of the Computer Society.*
- Reviewer, *IEEE International Symposium on Circuits and Systems (ISCAS).*

AWARDS

Title of Award	Granting Association	Dates
FV quality Freak-out bug Award	Intel Corporation	12.2022
Graduate Student Excellence Awards	Wright State University	04.2019
IEEE Dayton Section Outstanding Student	IEEE Dayton Section	04.2018
Certificate of Achievement	United States Department of the Army	10.2017