

CSE 243A (Section Id: 947925)

VLSI Computer-Aided Design

Synthesis Methodologies in VLSI Design & Test

Journal Reading List

Professor Alex Orailoğlu

EBU3B 3134

Tel: 858-534-0914 Fax: 858-534-7029

email: alex@cs.ucsd.edu

- Luca Piccolboni, Paolo Mantovani, Giuseppe Di Guglielmo, and Luca P. Carloni. “COSMOS: Coordination of High-Level Synthesis and Memory Optimization for Hardware Accelerators” *ACM Transactions on Embedded Computing Systems (TECS)*, Vol. 16, No. 5s, pp. 150:1-150:22, 2017. **Yiyu; Dec. 5, 5:50 PM**
- Liang Chen, Mojtaba Ebrahimi and Mehdi Baradaran Tahoori. “Reliability-Aware Resource Allocation and Binding in High-Level Synthesis” *ACM Transactions on Design Automation of Electronic Systems*, Vol. 21, No. 2, pp. 30:1–30:27, 2016. **Elbruz; Dec. 3, 6:07 PM**
- Alex Orailoglu and Ramesh Karri. “Automatic Synthesis of Self-Recovering VLSI Systems” *IEEE Transactions on Computers*, Vol. 45, No. 2, pp. 131–142, 1996. **Venkatesh; Dec. 5, 6:02 PM**
- Laurence Goodby, Alex Orailoğlu and Paul Chau. “Microarchitectural Synthesis of Performance-Constrained, Low-Power VLSI Designs” *ACM Transactions on Design Automation of Electronic Systems*, Vol. 7, No. 1, pp. 122-136, 2002. **Darren; Dec. 3, 5:55 PM**
- Mengying Zhao, Alex Orailoglu and Chun Jason Xue. “Joint Profit and Process Variation Aware High Level Synthesis With Speed Binning” *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, Vol. 23, No. 9, pp. 1640–1650, 2015. **Jinzhe; Dec. 5, 5:00 PM**
- Sumit Gupta, Rajesh K. Gupta, Nikil D. Dutt and Alexandru Nicolau. “Coordinated parallelizing compiler optimizations and high-level synthesis” *ACM Transactions on Design Automation of Electronic Systems*, Vol. 9, No. 4, pp. 441–470, 2004. **Shaun; Dec. 5, 5:25 PM**
- Jason Cong, Bin Liu, Stephen Neuendorffer, Juanjo Noguera, Kees A. Vissers and Zhiru Zhang. “High-Level Synthesis for FPGAs: From Prototyping to Deployment” *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. 30, No. 4, pp. 473–491, 2011. **Sivasankar; Dec. 5, 5:12 PM**
- Rajarshi Mukherjee and Seda Oğrenci Memik. “An Integrated Approach to Thermal Management in High-Level Synthesis” *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, Vol. 14, No. 11, pp. 1165–1174, 2006. **William; Dec. 5, 5:37 PM**