Model F17 - Memoriul științific al studentului doctorand

MEMORIU ȘTIINȚIFIC
Drd. Manolache Cristian

Studii de doctorat

Perioada: 04.10.2021 – 04.10.2025
Conducător științific: Prof.dr.ing. Burileanu Corneliu
Domeniu: Inginerie Electronică Telecomunicații și Tehnologii Informaționale
Titlul tezei de doctorat: Tehnici de optimizare și învățare automată aplicate în verificarea circuitelor integrate analogice

Activitate științifică

A. Lista de lucrări științifice (articole în reviste sau volume)

1. **Manolache Cristian**, Alexandru Caranica, Marius Stănescu, Horia Cucu, Andi Buzo, Cristian Diaconu, and Georg Pelz. "Advanced operating conditions search applied in analog circuit verification." In 2022 18th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD), pp. 1-4. IEEE, 2022.
2. **Manolache Cristian**, Alexandru Caranica, Horia Cucu, Andi Buzo, Cristian Diaconu, and Georg Pelz. "Enhanced candidate selection algorithm for analog circuit verification." In 2022 International Semiconductor Conference (CAS), pp. 137-140. IEEE, 2022.
3. **Manolache Cristian**, Cristina Andronache, Alexandru Caranica, Horia Cucu, Andi Buzo, Cristian Diaconu, and Georg Pelz. "Adaptive Planning Search Algorithm for Analog Circuit Verification." In 2023 International Semiconductor Conference (CAS), pp. 81-84. IEEE, 2023.
4. **Manolache Cristian**, Cristina Maria Andronache, Alexandru Caranica, Horia Cucu, Andi Buzo, Cristian Vasile Diaconu, and Georg Pelz. "Applying Multi-objective Acquisition Function Ensemble for a candidate proposal algorithm." In 2023 International Conference on Speech Technology and Human-Computer Dialogue (SpeD), pp. 116-121. IEEE, 2023.
5. **Manolache Cristian**, Cristina Andronache, Alexandru Guzu, Alexandru Caranica, Horia Cucu, Andi Buzo, and Georg Pelz. "Synthetic Benchmark for Data-Driven Pre-Si Analogue Circuit Verification." Electronics 13, no. 13 (2024): 2600. ISI IF 2.6 (Q2), WOS:001269706000001.
6. **Manolache Cristian**, Alexandru Guzu, Cristina Andronache, Alexandru Caranica, Horia Cucu, Gazmend Alia, Andi Buzo, and Georg Pelz. "SFP: A Metric for Assessing Circuit Failure Probability During Pre-Si Verification". UPB Scientific Buletin, Sec. C Electr. Eng. Comput. ISI IF 0.2 (Q4), WOS:001380943300014.

B. Participări la conferințe/workshop-uri

1. 45th International Semiconductor Conference (CAS), Poiana Brașov, 12-14 october 2022
2. 46th International Semiconductor Conference (CAS), Sinaia, 11-13 october 2023
3. 12th International Conference on Speech Technology and Human-Computer Dialogue (SpeD), București, 25-27 october 2023

C. Proiecte de cercetare științifică

1. “Efficiency and Effectiveness of Circuit Verification using Machine Learning Methods v2”, proiect R&D finanțat de Infineon Technologies Romania & Co. SCS.
2. “Efficiency and Effectiveness of Circuit Verification using Machine Learning Methods v3”, proiect R&D finanțat de Infineon Technologies Romania & Co. SCS.
3. “Generative AI for Requirement Engineering (GenAI4RE)”, proiect R&D finanțat de Infineon Technologies Romania & Co. SCS.

Student-doctorand

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