



*Computer Science and Engineering / Computer and
Network Architecture*

Seyed-Hosein Attarzadeh-Niaki

شماره تماس: ۲۹۹۰۴۱۰۶

رایانامه: h_attarzadeh@sbu.ac.ir

وب سایت:

<http://facultymembers.sbu.ac.ir/attarzadeh>

پروفايل علم سنجی:

http://scimet.sbu.ac.ir/SeyedHosein_AttarzadehNiaki

Education

- B.Sc: ,
- M.Sc: , Computer Engineering- Computer Systems Architecture
- Ph.D: ,

Research Interests

-
-
-
-

Professional Experiences

- , 1400→1402
- , 1399→1400
- , 1398→Now

Books

- Model-Implementation Fidelity in Cyber Physical System Design
Seyed-Hosein Attarzadeh-Niaki, Ekrem Altinel, Martijn Koedam, Anca Molnos, Ingo Sander, Kees Goossens
شابک: 2-47306-319-3-978, Springer International Publishing, Switzerland, 2017
- Handbook of Hardware/Software Codesign
Axel Jantsch, Ingo Sander, Seyed-Hosein Attarzadeh-Niaki

Industry Collaborations

■ ارتقاء و توسعه سامانه های نرم افزاری سیستم هوشمندسازی واحدهای مسکونی، اداری و صنعتی
1401

■ ارائه خدمات مشاوره فنی و طراحی و پیاده سازی در قالب پروژه با عنوان طراحی رابط سامانه های تست تجهیزات الکترونیک
1399

■ تدوین سند کارخانه هوشمند
1399

■ ارائه خدمات مشاوره در تدوین سند بیمارستان هوشمند
1399

■ طراحی و پیاده سازی سخت افزاری رابط های سامانه های تست تجهیزات الکترونیک - مرحله 1
1399

■ طراحی و پیاده سازی سیستم نرم افزاری خانه هوشمند نوین تراشه البرز
1397

Journal Papers

■ System-Level Modeling of Dynamic Applications with Scenario-Aware Dataflow Graphs
Seyed-Hosein Attarzadeh-Niaki, Mohammad Vazirpanah
Journal of Innovations in Computer Science and Engineering, Vol.1, pp. 1-13, 2023

■ NIMA: A NISC-based Micro Architecture Design Methodology for Fog Computing Applications
Somayeh Maabi, Seyed-Hosein Attarzadeh-Niaki, Maghsoud Abbaspour
Journal of Innovations in Computer Science and Engineering, Vol.1, pp. 90-102, 2023

■ Multi-objective optimization of TPMS-based heat exchangers for low-temperature waste heat recovery
Reza Attarzadeh, Seyed-Hosein Attarzadeh-Niaki, Christophe Duwig
APPLIED THERMAL ENGINEERING, Vol.212, pp. 1-12, 2022

■ An automated parallel simulation flow for cyber-physical system design
Seyed-Hosein Attarzadeh-Niaki, Ingo Sander, Mohammad Ahamadi
INTEGRATION-THE VLSI JOURNAL, Vol.77, pp. 48-58, 2021

■ Heterogeneous co-simulation for embedded and cyber-physical systems design
Seyed-Hosein Attarzadeh-Niaki, Ingo Sander
SIMULATION-TRANSACTIONS OF THE SOCIETY FOR MODELING AND SIMULATION INTERNATIONAL, Vol.96, pp. 753-765, 2020

■ An extensible modeling methodology for embedded and cyber-physical system design
Seyed-Hosein Attarzadeh-Niaki, I. Sander
SIMULATION-TRANSACTIONS OF THE SOCIETY FOR MODELING AND SIMULATION INTERNATIONAL, Vol.92, pp. 771-794, 2016

■ Field Programmable Compressor Trees Acceleration of Multi-Input Addition on FPGAs
Panagiotis Athanasopoulos, Philip Brisk, Alessandro Cevrero, Frank K. Gurkaynak, Paolo lenne, Yusuf Leblebici, Seyed-Hosein Attarzadeh-Niaki, Chrysostomos Nicopoulos, Hadi Parandeh-Afshar, Ajay K. Verma
ACM Transactions on Reconfigurable Technology and Systems, Vol.2, 2009

Conference Papers

■ A Systematic Embedded Software Design Flow for Robotic Application

Navid Mahdian, Seyed-Hosein Attarzadeh-Niaki, Armin Salimi-Badr
11th International Conference on Computer Engineering and Knowledge (ICCKE2021), pp.217-222

■ **Model-Based Design of A Real-time Context-Aware Speech Enhancement System on an FPGA-SoC**

Alireza Azadi, Seyed-Hosein Attarzadeh-Niaki, Yasser Shekoffeh
2020 20th International Symposium on Computer Architecture and Digital Systems (CADS), pp.1-4

■ **ANDRESTA An Automated NoC-Based Design Flow for Real-Time Streaming Applications**

Mahdi Abbaszadeh, Mohammadmahdi Mazraei, Dara Rahmati, Seyed-Hosein Attarzadeh-Niaki
2020 CSI/CPSSI International Symposium on Real-Time and Embedded Systems and Technologies (RTEST)

■ **OMID: Optimized Micro-Architecture Design for Fog Computing Applications**

Somayeh Maabi, Seyed-Hosein Attarzadeh-Niaki, Maghsoud Abbaspour
27th Iranian Conference on Electrical Engineering ICEE2019, pp.2033-2038

■ **Automatic construction of models for analytic system-level design space exploration problems**

Seyed-Hosein Attarzadeh-Niaki, Ingo Sander
2017 Design Automation and Test in Europe Conference Exhibition (DATE), Vol.20, pp.670-673

■ **ROS-Based Co-Simulation for Formal Cyber-Physical Robotic System Design**

محمد وزیرپناه، سیدحسین عطارزاده نیاکی، آرمین سلیمی بدر
بیست و هفتمین کنفرانس بین المللی کامپیوتر، انجمن کامپیوتر ایران، صفحات: ۱-۵

M.Sc. Theses

■ **A framework for modeling self-aware cyber-physical systems with SystemC**

Mohammad Vazirpanah
2022

■ **Hardware acceleration of network flow algorithms for mapping task graphs to MPSoCs**

Seyed bahram Hayavi
2022

■ **A Context-Aware Speech Enhancement FPGA-SoC-Based Architecture**

Alireza Azadi
2021