



Cristian Stancu

ANALOG-MIXED SIGNAL DESIGN ENGINEER

PROFESSIONAL SUMMARY

Motivated and detail-oriented Analog-Mixed Signal Design Engineer with over six years of experience in high-precision operational amplifier design, circuit stability analysis, and low-power electronic circuit development. Passionate about innovation, teaching, and mentoring, with a strong academic background and a PhD in Electronic Engineering. Adept at teamwork, technical leadership, and problem-solving in complex projects.

PROFESSIONAL EXPERIENCE

ANALOG-MIXED SIGNAL DESIGN ENGINEER

Aumovio Technologies Romania | Timisoara
May 2025 – Present

- Define and translate specifications into block-level requirements.
- Transistor-level design of analog/mixed-signal ASICs (schematic, sizing, biasing).
- Layout of designed circuits with matching and parasitic aware optimization.
- Pre/post-layout (PEX) verification across corners and Monte Carlo mismatch.
- Design validation, documentation, and test/verification procedure development.

Key Skills: ASICs Design, Cadence Virtuoso, Auto-Zero Comparators, DACs, CMOS circuit layout, Design validation & debug methodology.

DESIGN ENGINEER TL

On Semiconductor Romania | Bucharest
Oct 2019 – April 2025

- Technical lead (since 2024) for multiple analog circuit design projects.
- Designed and simulated high-precision operational amplifiers with low offset and low noise.
- Conducted stability analysis and transient response optimization using innovative IC blocks.
- Investigated high-voltage DMOS MOSCAP variation and developed mitigation strategies.
- Developed testbenches using Verilog-A and gained proficiency in SystemVerilog.
- Mentored interns and supervised Bachelor's and Master's theses in analog design.
- Prepared and delivered technical design reviews.

Key Skills: Analog Design, Cadence Virtuoso, Operational Amplifiers, Stability Analysis, Low-Power Electronics.

CONTACT DETAILS

Margelelor 11, District 6
Bucharest, Romania
Email: crististancu96@yahoo.com
Phone: +40 743 765 463
[LinkedIn](#)

TECHNICAL SKILLS

- Analog Circuit Design: Operational Amplifiers, Bandgap References, Low-Dropout Regulators (LDO)
- Simulation & Tools: Cadence Virtuoso, SystemVerilog, Verilog-A
- Software: Microsoft Office (Word, Excel, PowerPoint, Outlook)
- Programming: Basic scripting for electronic circuit design
- Languages: English (Advanced), German (Beginner)

CERTIFICATIONS

- Techniques for Handling Noise & Variability in Analog Circuits (MEAD, 2025)
- Operational Amplifiers: Theory & Design (MEAD, 2022)
- CCNA 2 & CCNA 1 (2017, 2016)
- ECDL Certification (2015)

PUBLICATIONS

- Current Mirror Precision in CMOS: Beyond Threshold Voltage Mismatch (ATEE, 2025)
- Slew Rate Enhancement Circuit for Improved Transient Response in Folded Cascode Operational Amplifiers (CAS, 2025)
- Optimized Current-Source based on Brokaw Architecture for Constant Input Transistors Transconductance (ECAI, 2025)
- Enhanced Charge Pump Architecture with Feedback Supply Selector for Optimized Switching Performance (Electronics, 2025)
- Offset Voltage Reduction in Two-Stage Folded Cascode Operational Amplifier Using High Precision Source Degeneration (Electronics, 2023)
- Temperature & Power Supply Compensated CMOS Clock Circuit (Electronics, 2023)
- Offset Voltage Reduction Methods for a Two-Stage Folded Cascode Operational Amplifier (ECAI, 2022)
- Advanced MOS Structures Design for Low-Power Devices – Review and Future Challenges (2021)

ADDITIONAL ACTIVITIES

- Volunteer, Electronic Students League (2015-2017)
- Hobbies: Travel, running, hiking, tennis, networking

DRIVING LICENSE

- Category B

TEACHING ASSISTANT

National University of Science and Technology Politehnica Bucharest | Bucharest

Oct 2021 – Present

- Organized and conducted Analog Circuits Laboratory sessions for Microelectronics Master's students.
- Developed course materials and provided guidance on circuit analysis and design.

Key Skills: Teaching, Communication, Time Management, Technical Training

INTERNSHIP - ANALOG DESIGN

On Semiconductor Romania | Bucharest

Mar 2019 – Sep 2019

- Designed and simulated a low-voltage operational amplifier, ensuring compliance with key electrical parameters.
- Analyzed and optimized CMRR, PSRR, bandwidth, phase margin, and noise performance.

INTERNSHIP - HARDWARE DESIGN

On Semiconductor Romania | Bucharest

Jul 2018 – Sep 2018

- Designed hardware for an Equivalent Series Resistance (ESR) meter and performed circuit simulations.

EDUCATION

DOCTORATE (PHD) - ELECTRONIC ENGINEERING

National University of Science and Technology Politehnica Bucharest

2021 – Present

- Research: Design of an operational amplifier with enhanced performance.

MASTER’S DEGREE - MICROELECTRONICS & NANOTECHNOLOGY

National University of Science and Technology Politehnica Bucharest

2019 – 2021

- Research Paper: Design of operational amplifier topologies for minimizing offset voltage

BACHELOR’S DEGREE - OPTOELECTRONICS, MICROELECTRONICS & NANOTECHNOLOGIES

National University of Science and Technology Politehnica Bucharest

2015 – 2019

- Research paper: Low power operational amplifier