

HAFTU HILUF KAHSAY

RF/MMIC Design Engineer

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EXPERIENCE

MMIC Designer

United Monolithic Semiconductors (UMS)

- September 2023 – Ongoing Vilebon-sur-Yvette, France
- Designed and characterized a Ka-band (26 to 32 GHz) Class AB power amplifier
 - Designed and characterized a Ka-band (28 to 32 GHz) Doherty power amplifier
 - Ka-band Outphasing power amplifier design (circuit level); ongoing implementation
 - Provided supervision and support for DC, S-parameter, large-signal, and linearity measurements, assisting technicians

PhD Candidate

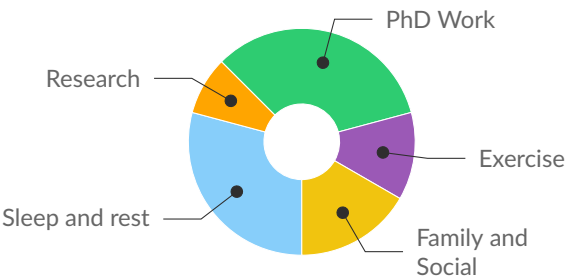
Xlim research Institute

- October 2022 – Ongoing Limoges, France
- Research on mmWave power amplifier design using GaN technologies for radiocommunication applications
 - Designed Ka-band power amplifiers: transistor-level analysis, waveform engineering, harmonic balance simulations
 - Developed custom source/load-pull simulation setups; studied conventional and advanced architectures
 - Investigated stability of different architectures of power amplifiers

TECHNICAL SKILLS

- RF MMIC Design: Electrical Circuit simulation, Layout, EM simulation, characterization
- CAD Design: Keysight ADS (including Momentum for EM simulation), CST studio suite, Ansys HFSS, Cadence, LabView
- Measurement tools: Familiar with basic use of network analyzers, spectrum analyzers, and power meters for RF measurements
- Programming language: Python, Matlab

TYPICAL WORK DAY FOCUS



LANGUAGES

- English ● ● ● ● ●
- French ● ● ● ● ●
- Amharic ● ● ● ● ●
- Tigrigna ● ● ● ● ●

EDUCATION

Ph.D. in High Frequency Electronics

University of Limoges

Sept 2022 – October 2025

Thesis title: Design of millimeter wave power amplifiers based on GaN technology for radiocommunication applications

M.Sc. in Erasmus Master on Innovative Microwave Electronics and Optics

University of Limoges, France and University of Brescia, Italy

Sept 2020 – August 2022

B.Sc. in Electrical Engineering

Bahir-dar University, Ethiopia

Sept 2014 – July 2019

REFEREES

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