


Ramin Ala

Electrical Engineer

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 LinkedIn

 Website

EDUCATION

- **Ph.D.** 2019 – 2023
University of New Brunswick
New Brunswick, Canada
Thesis: *Efficient and Ultra Low Mass Harmonic Radar Transponders for Insect Tracking Applications*
- **M.Sc.** 2007 – 2010
K. N. Toosi University of Technology
Tehran, Iran
- **B.Sc.** 2002 – 2007
University of Isfahan
Isfahan, Iran

WORK EXPERIENCE

- **Iranian Space Research Center, Tehran, Iran** 2016 – 2018
Senior RF Designer
- **Ertebatat Baregheh Pardis, Tehran, Iran** 2014 – 2016
Senior RF Designer
- **OTS, Tehran, Iran** 2010 – 2014
RF and Microwave Engineer

PROJECT PORTFOLIO and SKILLS

- **Design expertise:**
 - Design and implementation of the RF Section of Superheterodyne Receivers and Transmitters, encompassing various frequency bands, including X-band and Ku-band..
 - Design and implementation of the Microwave passive devices (Filters, Antenna, Power dividers and directional couplers, in wide ranges of frequencies and structures).

- Design and implementation of Microwave active devices (Power amplifiers, Frequency Synthesizer).
- Design and implementation of Electronic circuits (Voltage regulators, Power amplifier bias controller, ...).
- Testing and troubleshooting the wide range of devices.
- **Lab expertise:**
 - All electronic lab instruments (Oscilloscope, Power supplies, Multimeter).
 - All Microwave and RF lab instruments (Vector Network Analyzer, Spectrum Analyzer, ...).
 - Antenna measurements
- **Data Science:**

Proficient in data manipulation and analysis using R packages.

SOFTWARE PROFICIENCY

- **Industrial tools:**
 - Ansys HFSS
 - CST
 - Altium Designer
 - PathWave Advanced Design System (ADS)
 - AWR Microwave Office
- **Programming and other Tools:**
 - R
 - MATLAB
 - LaTeX
 - Git

JOURNAL PUBLICATIONS

1. R. Ala, C. D. Rouse and B. G. Colpitts, "An Extra Low-Mass Harmonic Radar Transponder for Insect Tracking Applications," in *IEEE Transactions on Radar Systems*, vol. 1, pp. 146-154, 2023, doi: 10.1109/TRS.2023.3286270.
2. R. Ala, B. Ahmadi, "A comparative study of high-power low-pass filters for satellite communications," *Microw Opt Technol Lett*, 2019; 61: 1968-1971. doi: 10.1002/mop.31783.

REFERENCES

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|-----------------------------|------------------|-----------------------|
| 1. Dr Chris Rouse | Professor at UNB | chris.rouse@unb.ca |
| 2. Dr Bruce Colpitts | Professor at UNB | colpitts@unb.ca |
| 3. Dr Brent Petersen | Professor at UNB | Brent.Petersen@unb.ca |