

Antenna Engineer

Location Stockholm (Sweden) or Asturias (Spain)

Contact sara.fernandez@northern-waves.com

Northern Waves is looking for an Antenna Engineer to design, simulate and validate high-frequency antennas and passive RF components for space, telecommunications, automotive radar and defence. The role combines electromagnetic design with prototyping, additive manufacturing and RF testing.

About Northern Waves

Northern Waves develops compact, lightweight and high-performance RF and antenna hardware using proprietary fully metallic additive manufacturing at microwave, millimetre-wave and sub-THz frequencies. Our work covers the full development cycle, from requirements and simulation to manufacturing, measurement and customer delivery.

Key responsibilities

- Design and optimise antennas, arrays, feeds, horns, waveguide components and other passive RF structures.
- Perform full-wave electromagnetic simulations and optimisation using CST Studio Suite, Ansys HFSS or similar tools.
- Translate electrical requirements into robust RF and mechanical designs suitable for manufacturing.
- Apply Design for Additive Manufacturing (DfAM) principles and coordinate design iterations with manufacturing and mechanical teams.
- Prepare simulation models, technical drawings, design reviews and engineering documentation.
- Plan and perform RF measurements, compare simulated and measured performance, and support technical troubleshooting.
- Contribute to customer discussions, technical proposals and collaborative R&D projects.

Candidate profile

Required

- MSc or PhD in Telecommunications, Electrical Engineering, RF/Microwave Engineering, Applied Physics or a related field.
- Strong foundation in antennas, electromagnetics, microwave engineering and waveguide technology.
- Experience with electromagnetic simulation software, preferably CST or HFSS.
- Professional working proficiency in English and clear technical communication skills.

Valued experience

- Millimetre-wave or sub-THz antenna design and measurement.
- Arrays, horns, feeds, filters, OMTs or other passive RF components.
- MATLAB or Python for analysis, automation and optimisation.
- Mechanical CAD, preferably SolidWorks.
- Metal additive manufacturing, DfAM or manufacturing-aware RF design.

What we offer

- Significant technical ownership in next-generation antenna and RF hardware development.
- International projects across space, telecom, automotive radar and defence.
- Direct access to simulation, metal additive manufacturing, prototyping and RF validation.

How to apply

Send your CV and a short introduction to sara.fernandez@northern-waves.com

Relevant publications, project examples or a portfolio may also be included. Applications will be reviewed on a rolling basis.