

Position: Wireless Research Engineer (full time)
Time: Immediate
Location: Somerville, MA (just outside Boston)
Contact: jobs@altaerosenergies.com
Website: www.altaerosenergies.com

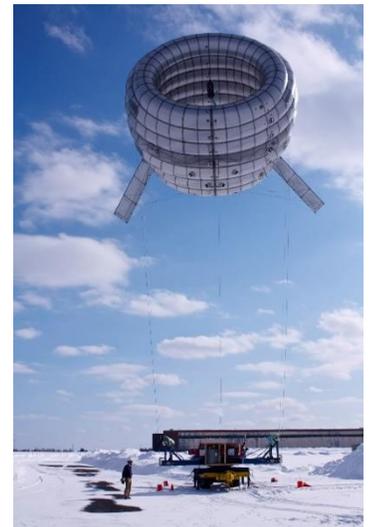


Altaeros Energies seeks a Wireless Research Engineer to play a key role in developing 3G, 4G and advanced wireless systems for Altaeros' autonomous Super Tower telecom platform. The ideal candidate will have experience designing and implementing LTE and UMTS systems using a variety of vendor technologies. Successful candidates should be comfortable using a variety of system-level simulation applications. He or she thrives in a fast-paced, dynamic work environment, working to solve some of the most exciting and important global challenges. Compensation includes salary, equity, and benefits.

Qualified candidates should submit a CV, cover letter and optional portfolio with the subject [Wireless Research Engineer – Your Name] to jobs@altaerosenergies.com.

Qualifications:

- Master's degree or advanced degree in Wireless Telecommunications, Computer Science, Electrical Engineering or related field.
- 5+ years of experience in research with a proven track record in the field of wireless network.
- Track record in developing UMTS and LTE interface protocols.
- Experience and understanding of the tuning and optimization of Ericsson/Huawei/Nokia 3G and 4G parameters and features.
- Technical expertise in wireless radio access network architecture, protocol design, system modelling, optimization and simulation.
- Design and specifications of RAN protocols such as MAC, RLC, RRC, PDCP, PHY, TCP/UDP routing and transport protocols.
- Knowledge of the LTE core and RAN architecture, procedure, signaling, IP networking, and mobility solutions.
- Experience in the standardization of wireless communications systems, e.g. 3GPP.
- Proficiency with C, C++, PYTHON, MATLAB/ Simulink or SQL.
- Expert knowledge of statistical modeling, traffic engineering and wireless communications.



Responsibilities/Activities:

- Responsible for architecting, designing, algorithm development, implementation and verification of physical layer requirements for 3G & 4G wireless systems.
- Design and development of system-level simulation platforms (e.g. NS-3 LENA, WM-SIM, MATLAB LTE System Toolbox) to evaluate system performance under multi-path-fading channel propagation and MIMO scheme for LTE, UMTS and 5G technologies.
- Create and maintain strong collaborative associations with university-based researchers, other leading research bodies, business units and government agencies.
- Performance analysis and feasibility studies using simulations, experiments and analytical modeling.
- RF Parametric Optimization and troubleshooting involving the use of various complex data collection and post-processing tools to assess VOLTE/ LTE /UMTS network performance and propose solutions to problem.
- Develop radio planning and optimization guidelines based on customers' needs and standards.
- Focus on LTE/UMTS handovers algorithms implementation and soft/hard handover mechanism.
- Perform engineering feasibility studies to support various wireless deployment scenarios.
- Conduct features implementation, network modelling and capacity dimensioning.

About Altaeros Energies, Inc.

Our mission is to deliver the next generation of infrastructure to rural and isolated communities around the world. And to have fun doing it! We combine proven technology with flight control innovations that enable cost effective autonomous deployment of tethered airborne platforms. Applications for Altaeros' products include power generation, telecommunications, and technology enabled agricultural services. Founded in 2010, Altaeros launched the world's first fully functional airborne wind turbine in 2012 and is now working to commercialize its Super Tower telecommunication platform.