Principal 5G Location Algorithms Engineer

ZaiNar is seeking brilliant, innovative minds to advance the core algorithms behind our industry-leading positioning platform. As a **Principal 5G Location Algorithms Engineer**, you will design, implement, and optimize advanced signal processing and location estimation algorithms to determine the real-time position of devices in the physical world. You will play a foundational role in shaping ZaiNar's IP portfolio and future product capabilities, while working closely with cross-functional teams to test, refine, and scale your innovations.

JOB RESPONSIBILITIES

- Define and implement algorithms to extract precise fine-timing and spatial information from noisy 5G signals.
- Identify, document, and prototype improvements to current location estimation techniques and adapt them to new industry standards.
- Contribute novel techniques to ZaiNar's growing patent and intellectual property portfolio.
- Prototype and test signal processing algorithms in MATLAB and Python.
- Collaborate with software developers to facilitate the implementation and integration of signal processing algorithms.

MUST HAVE ATTRIBUTES/SKILLS

- PhD in Electrical Engineering or Applied Mathematics, or equivalent research experience, with a focus on radiolocation or radionavigation.
- Familiarity with OFDM and Zadoff-Chu sequences.
- Experience with parameter estimation on radio signals.
- Solid understanding of time-based location techniques.
- Demonstrated programming experience in MATLAB and Python.
- Team-oriented mindset with a respectful, collaborative approach suited to a fast-paced startup environment.

SHOULD HAVE ATTRIBUTES/SKILLS

- Proficiency with Linux command-line tools and a Linux-based development environment.
- Familiarity with the radio physical layer.

NICE TO HAVE ATTRIBUTES/SKILLS

- Demonstrated programming experience in C.
- Experience with cellular networks and radios.
- Experience with cellular network planning, drive testing, and propagation models.
- Experience in signals intelligence (SIGINT), electronic warfare, GPS/GNSS, or radar systems.
- Familiarity with the Erlang programming language.