Job Title:	Analog Design Engineer
Department:	Engineering
Division:	Electronics

Position Summary:

The Analog Design Engineer will be responsible for designing and developing analog circuits, including amplifiers, filters, oscillators, and voltage references, utilizing circuit-level simulation tools and layout design tools. They will ensure adherence to design rules and guidelines, paying close attention to factors such as device physics, parasitic effects, noise, and signal integrity. Additionally, the engineer will employ parasitic extraction tools to accurately analyze post-layout simulation results. Collaborating closely with cross-functional teams, the engineer will contribute to delivering high-quality analog chip designs that meet performance specifications and application requirements. Strong analytical skills, attention to detail, and proficiency in analog design methodologies are essential for success in this role.

Roles and Responsibilities:

- Design and develop analogue circuits such as amplifiers, filters, oscillators, and voltage references using circuit-level simulation tools.
- Selecting the appropriate circuit topologies and architectures to meet the specified requirements.
- Conduct detailed analysis of circuit behaviour, considering factors such as device physics, parasitic effects, noise, and non-linear behaviour to optimize performance.
- Throughout the design process, extensive simulation and verification are performed to ensure that the analogue chip meets the specified requirements. This includes simulations of circuit behaviour under various operating conditions, process variations.
- Creating Physical layout of Analog Circuits taking into account factors such as matching, parasitic, noise, and signal integrity.
- Creating hardware description of the ASIC using Hardware Description Language (HDL).

Requirement

- Bachelor's or Master's degree in Electrical Engineering, Computer Science, or a related field.
- Proven experience in digital analogue positioning system design and development.
- Proficiency in software tools such as MATLAB, Simulink, LabVIEW, Python, C++, CUDA, ANSYS, and/or COMSOL Multiphysics.
- Strong understanding of digital signal processing and analogue signal processing.
- Hands-on experience with positioning algorithms and simulation tools.
- Effective communication and collaboration skills.