



D-Wave Systems Inc.
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Superconductor Hardware Design Engineer

D-Wave is seeking a Superconductor Hardware Design Engineer responsible for the design and layout of our superconductor quantum computing devices. The Superconductor Hardware Design Engineer will work in conjunction with other engineers and scientists to design, model, and layout our quantum computing processors.

Specific responsibilities include, but are not limited to, the following:

- Design and layout of superconductor quantum processors and superconductor circuitry for the world's first industrial-scale deep submicron Josephson junction fabrication technology
- Development of methodologies, models, and software CAD tools for optimizing on-chip device characteristics and performance
- Working with fabrication personnel to make best use of fabrication process design rules, capabilities, and limitations
- Working with the hardware development groups to perform basic operation and testing of chips to confirm designed device specifications
- Documentation of designs and layouts, including version changes, layout improvements and capturing patentable inventions

Required Qualifications:

- MSc (or BSc and equivalent experience) in electrical engineering or physics with specific experience in design and layout of Josephson-junction based superconductor circuitry
- Simulation and Layout CAD software knowledge; experience with Cadence DFII preferred
- Knowledge of superconducting electronics-specific tools (wrSPICE, PSCAN, LMeter, FastHenry)
- Strong software programming skills in Unix/Linux environments, working knowledge of Lisp or Cadence SKILL
- Highly organized and capable of learning quickly
- Creative, self-motivated individual who can work effectively with an interdisciplinary team

Desired Qualifications:

- Understanding high-frequency/RF design issues and experience with extraction/simulation software (e.g., HFSS) is an asset
- Experience in a research laboratory setting is an asset

Interested applicants should send a resume and cover letter to HDE2006@dwavesys.com.

D-Wave's world-class low temperature lab facility and offices are located in the Vancouver, BC area. Consistently ranked as one of the best places to live, Vancouver offers both a vibrant city life as well as a natural setting for many outdoor leisure and sport activities. Read more about our highly "livable" city at www.vancouver.com and www.bcpassport.com.