



Position: Nanofabrication Engineer

Spin Transfer Technologies (www.spintransfer.com) is focused on the development of novel computer memory devices in collaboration with New York University researchers and potential industry partners. The company is seeking a nanofabrication engineer who will be responsible for fabrication of prototype devices and large arrays of devices to support development efforts. The successful candidate will work with a cross-organizational research and management team, and be able to function independently with minimal supervision in a startup environment. Some travel is required.

Duties include designing and implementing a robust lithographic process for device fabrication, realization of pattern and mask sets, and optimization of process parameters. The position will require extensive use of electron beam lithography and other standard processing tools available at National Nanofabrication Facilities. The successful candidate will work closely with New York University researchers, exchanging materials, devices and data toward realizing well-defined project milestones. The position will be preferably located at a National Nanofabrication Center, such as the CNF, in Ithaca, New York.

Skills Required:

- Lithography: Electron beam lithography, optical lithography, E-beam pattern and optical mask design, bilayer e-beam and optical resists, hard-mask techniques
- Pattern formation: ion-milling, reactive ion etching, lift-off
- Inspection: Scanning electron microscopy, atomic force microscopy
- Thin film deposition: RF and DC sputtering, thermal and electron beam evaporation
- Chemical mechanical planarization (CMP)
- Wire bonding

Other desired skills:

- High frequency electronic device simulation and design (TX-Line and related software)
- Spin-transfer devices and magnetic nanostructure patterning
- CMOS technology

Applicants will preferably have a minimum of a MS in Physics, Applied and Engineering Physics, Electrical Engineering or a closely related discipline and several years of practical nanofabrication experience. Good communication and interpersonal skills are also essential.

Please send applications, including a résumé with three references, by e-mail to employment@spintransfer.com.