302.683.1976



Human Computer Interaction Research Scientist, Computational Biology and Informatics (CBIO), Agilent Laboratories, Santa Clara, CA

Agilent Laboratories, Agilent Technologies' central research laboratories in Santa Clara, CA has an immediate opening for a Research Scientist with experience in Human Computer Interaction. CBIO is a growing, innovative group of researchers dedicated to multidisciplinary projects and having backgrounds in computer science, mathematics, physics, chemistry, cell biology and social science. CBIO is focused on leading-edge research and development in areas that will, over time, have direct impact on Agilent's future generations of measurement instruments for life science and chemical analysis and associated informatics products. You will have the opportunity to collaborate with world-class scientists both within Agilent Labs and outside, through our external collaborations.

For this position, we are seeking a candidate to identify and develop novel opportunities for interactions between users, computer controlled instruments and downstream analysis software. This position is for a research scientist to help define and build experimental software systems addressing such topics as:

- Intuitive instrument usage and control
- Emerging modalities of interaction such as multi-touch, tangible interfaces, haptics, etc.
- · Consistency between instrument user interfaces and downstream analytics software

The qualified candidate should have a track record of innovation and scientific contribution, such as shown by peer-reviewed publication, in one or both of the above, or closely related, areas. The candidate should also have a demonstrated record of pragmatic contribution, by having built working, deployed software systems dealing with issues like:

- Maintaining high performance and interactivity while visualizing large data sets
- Strategies for accessing and computing across large data sets
- Integrating individual tools into an integrated data acquisition and/or analysis workflow
- Evaluating techniques to determine the effectiveness of visualization design and interaction

The ideal candidate will be expected to manage his/her own research with minimal supervision yet be a team player with strong communication skills.

If applying, please describe in a cover letter what subject area or technology you would like to learn in the near future and explain why.

Qualifications:

- PhD or equivalent research plus three years or more of experience in an area of Cognitive Science, Social Science or Computer Science with a specialization in HCI or related area or experience
- Demonstrated achievement in user interface design, user experience studies, user-center design
- Understanding of visual design, interaction and usability principles
- $\bullet \ Demonstrated \ expertise \ in \ exploratory \ software \ prototyping \ and \ system \ development$
- Fluency in one or more object-oriented programming languages such as Java, C# or C++
- · Ability to apply skills in new area problem domains with cooperation of appropriate domain experts
- Track record of innovation and scientific contribution, such as shown by peer-reviewed journal publication
- Ability to provide technical leadership in an area of specialization
- Self starting, demonstrated initiative, strong problem solving
- Excellent communication and teamwork

Desired Experience

- Experience developing production software in a corporate environment and/or delivering research prototypes to such organizations
- Familiarity with web development technologies (for example, AJAX, LAMP, Rails, MediaWiki, XML,)
- Familiarity with instrumentation design and use such as life science and/or chemical analysis instrumentation
- Experience with data mining, stochastic/statistical analysis methods