



Be part of a dynamic team that is using nanotechnology to enable routine, accurate, cost-effective analysis of genomic structural variation, in support of our mission of elucidating the genetic underpinnings of disease, increasing diagnostic yield, and ultimately improving patient outcomes. Nabsys is the pioneer in high-definition electronic genome mapping. Headquartered in Providence, RI, Nabsys uses proprietary electronic nanodetectors to analyze long DNA molecules traveling at high velocity. Our first-generation instrument and consumables have been shipping to customers for a year. We are currently scaling proven technology to substantially reduce cost and time-to-answer, on our way to making genomic structural information available to every laboratory.

Position: Senior Software Engineer – Signal Processing

Nature of Role: This position is a key role. The successful candidate's work will impact instrument design, hardware/firmware/software tradeoffs and analysis software design.

Responsibilities:

- Design, architect, develop, test, deploy, and maintain signal processing algorithms and other major software components
- Evaluate tradeoffs between algorithm efficiency and run-time
- Prototype algorithms using MATLAB and Python
- Write high-quality, well-tested, production-ready code in C# and C++
- Develop and maintain an automated testing infrastructure
- Collaborate with an experienced interdisciplinary staff

Requirements:

- MS in Electrical Engineering or Computer Science with 5+ years of experience or BS in Electrical Engineering or Computer Science with 10+ years of experience
- Excellent engineering skills, including:
 - Digital signal processing, both theoretical and practical
 - Statistical evaluation and quantitation of algorithm efficacy
 - Visualization of signal processing results
 - Use of well-structured MATLAB for algorithm prototyping and evaluation
 - Object-oriented design and programming
 - Writing production-ready code in C# and C++
 - Efficient multithreaded programming
- Preference for prior experience including:
 - Digital signal processing experience with time-domain signals including filter design, signal-to-noise maximization, and deconvolution of concurrent events
 - Machine learning experience
 - Cloud implementation and deployment
- Solid mathematical and analytical skills
- Pragmatic approach to problem solving
- Excellent organizational and interpersonal communication skills
- Thrive in a fast-paced and challenging environment with interdisciplinary collaboration
- Willingness to work on fast-paced challenging projects
- Love of interdisciplinary collaboration

Nabsys is an equal opportunity employer. All applicants will be considered for employment without attention to race, color, religion, sex, sexual orientation, gender identity, national origin, veteran or disability status.



Compensation:

- Competitive salary
- Equity stake
- Benefits include health, dental, vision, 401(k), unlimited vacation, life insurance