LOCUS BIOSCIENCES

Software Engineer // Sept 2018

Locus Biosciences is seeking a highly motivated and entrepreneurial applicant to join our team as a full-time Software Engineer. This position is well suited for those that have a strong desire to directly design and extend Locus' machine learning and software-based genomics discovery capabilities.

The primary responsibility for the position is the development and maintenance of our phage discovery genomics pipeline, with targeted goals of building a world class genomics machine learning architecture for bacteria and phage genetics and delivering dashboard outputs that clearly report and visualize the insights gained through deep analysis of our data. This role will develop and lead Locus' vision for applying machine learning architecture to better understand phage genomes, accelerate Locus' synthetic biology platforms and enable the automatic recognition of natural genetic features that underpin bacteria and phage compatibility.

An ideal candidate will have extensive algorithm development and software engineering experience that complements a core skillset in genomics and informatics. The major focus for the position will be reducing the parameter space for large genomics datasets and developing pattern recognition frameworks that cluster genetic information into phenotypically relevant annotations. A background in Computer Science or Software Engineering complemented by experience in bioinformatics, general microbiology, and molecular biology would be preferred. This individual must be able to communicate effectively in formal and informal settings and be able to work well within a team.

Responsibilities will include:

- Developing phage and bacteria genomic classifiers that predict gene function from an expanding dataset of phenotypic and genotypic information produced by our automation platforms
- Assist in software and coding needs that support our bioinformatics team and improve existing genomics pipeline
- Report insights from machine learning and genomics pipelines using modern web-based reporting dashboards
- Help to build and maintain Locus' cluster computing architecture
- Help to build and maintain Locus' distribute data resources
- Develop and maintain systems and data repositories that correlate genomic activities with phenotypic data sets generated from the Locus biology automation platforms

Candidate must possess:

- Hands-on experience in computational genomics. Minimum 2-year experience
- Experience using distributed source code versioning systems. Minimum 1-year experience
- Experience with vector processing architectures and high-throughput parallel computing infrastructure
- Working knowledge of bacterial genetics and/or microbiology
- Ability to structure, implement and maintain study plans in the face of evolving projects & programs
- Willingness to develop solutions to difficult objectives independently and consistently
- Flexibility in schedule, requires willingness to provide on-site, on-demand maintenance to minimize down-time of equipment

Preferred qualifications:

- Working knowledge of CRISPR/Cas systems
- MS or PhD in computer science or software engineering with a focus on biological systems
- Must be highly motivated and can work independently as well as part of an interdisciplinary team with diverse backgrounds

Job Type: Full-time
Job Location: Research Triangle Park, North Carolina
For immediate consideration, please email your resume or CV to: aeron.hammack@locus.com
Direct applicants only. No agencies please.

About Locus Biosciences

Locus Biosciences is an emerging biotechnology company focused on the discovery and development of a next generation CRISPR-Cas platform for precision antimicrobials. Locus designs and creates novel applications that

direct the powerful CRISPR-Cas3 nuclease to target and kill cells by irreversibly destroying DNA. Our platform enables the design and development of powerful antimicrobials that avoid currently known antibiotic resistance mechanisms while leaving non-target bacteria unharmed. Built on prokaryotic technology for prokaryotic targets, Locus is advancing its platform to create therapeutics for critical disease areas ranging from resistant bacterial infections to the microbiome.