Scientific Data Processing Engineer

Hiring organization
Ometa Labs; www.Ometalabs.net

Date posted
July 29, 2025

Description

Job Description – Join the dynamic team at Ometa Labs! We create cutting-edge computational tools for mass spectrometry, enhancing speed, scalability, and discovery capabilities for metabolite identification. This transformative work has wide-ranging applications in areas such as monitoring environmental contaminants, tracking chemical exposure, and exploring novel natural products.

Responsibilities – Collaborate with a multidisciplinary team to advance the development and optimization of our integrated platform for high-throughput metabolite identification using untargeted tandem mass spectrometry (MS/MS) data.Design and implement computational workflows to facilitate the identification and characterization of novel chemical compounds within large-scale mass spectrometry datasets.Contribute to the enhancement of our software's capabilities in data visualization, user interaction, and the integration of new analytical tools to improve metabolite discovery and data re-analysis.Ensure the software's robustness and scalability to handle high-throughput data analysis.Integrate a combination of advanced scoring algorithms, including machine learning approaches, to improve the accuracy and reliability of metabolite identification without the need for purified chemical standards.Work closely with team members to optimize code performance and maintain high-quality coding standards, leveraging Python and Nextflow for workflow development.Stay informed about emerging trends and technologies in computational mass spectrometry to drive continuous improvement and innovation within the platform.Engage actively with users and stakeholders to gather feedback and ensure the platform meets their evolving needs and scientific challenges.

Qualifications – Masters or Ph.D. in Computational Biology, Bioinformatics, Chemistry, Computer Science, or a related field.Demonstrated expertise in Natural Product Chemistry and/or Metabolomics.Strong background in scientific programming with experience in Python; familiarity with Nextflow is preferred.Experience with mass spectrometry data analysis is highly desirable.Ability to work collaboratively within a small team environment and engage effectively with diverse stakeholders.Demonstrated experience optimizing code and developing computational workflows.Excellent problem-solving skills and the ability to think critically and creatively to advance project goals.Capable of managing competing priorities to ensure timely delivery of milestones.Candidates must be U.S. citizens or US permanent residents and reside within the U.S.Fully remote position; candidates should have the capacity to work effectively from home.

Contact – Joseph Egan, Joseph@Ometalabs.com

Post End Date – 09/30/2025

Contacts

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