Bioinformatics/ Data Engineer

Day Zero Diagnostics (DZD) is an exciting startup revolutionizing infectious disease diagnostics, by leveraging cutting-edge sample prep technologies, whole genome sequencing and machine learning. We are building the next generation of IVDs, able to perform comprehensive bacterial species ID and antimicrobial resistance and susceptibility (AMR/S) profiling in less than 8 hours of sample receipt, without the need for culture.

Our first application is for Sepsis. Sepsis is responsible for about a third of hospital deaths and costs hospitals in the US about $24B annually. Using the current culture-based approach for pathogen ID and AST that takes 2-5 days and has a 40% failure rate, patients with Sepsis are treated with broad-spectrum antibiotics, leading to significant toxicity, higher rates of organ injury, increased risk of *c. difficile* infection, and contributing to the growth of the antibiotic resistance problem, globally.

By providing an accurate and comprehensive diagnosis within the first cycle of treatment, patients can get appropriate antibiotic therapy for systemic infections such as sepsis, reducing hospital treatment durations and costs.

At Day Zero Diagnostics we are passionate about our mission of modernizing infectious diseases diagnosis and treatment. Employees gain experience in a multidisciplinary and fast-paced start-up, and have ample opportunities to acquire new skills, engage with emerging technologies, work closely with our accomplished team, and communicate their results, all while working in a supportive and energetic environment.

Primary responsibilities:

Under the direction of a technical manager, the applicant will independently carry out the following types of tasks:

- Develop, operate and maintain data systems and pipelines

- Maintain organized, well-tested, version-controlled code and documentation

- Communicate clearly with the team regarding progress and results

- Work with data scientists and key stakeholders to strive for greater functionality in our data systems

- Integrate basic data analysis into automated pipelines and analytics dashboards

Qualifications:

- Bachelor's or Master's Degree in Computer Science, Bioinformatics, or equiv.

- Fluency in Python, SQL and Linux. Experience with PyData stack desirable

- Good understanding or exposure to software engineering best practices (e.g. git, docker)

- Familiarity with data analysis/ analytics a plus

- Familiarity with NGS data and bioinformatics tools/ techniques not required

- Highly motivated and independent

- Strong written and oral communication skills