Simulation is a major source to generate data for validating computational models in biology. Numerous simulators are currently available but selecting an appropriate NGS (Next Generation Sequencing) simulator is challenging. With the objective of assisting researchers to select an appropriate NGS simulator according to their need, in this project, we propose OMNI-NGS simulator, an all-in-one tool that houses widely used NGS simulators. This web-based user-friendly tool provides the user with an interactive decision tree to select the best suitable simulator according to their need. Moreover, it not only allows the user to generate simulated data using default settings but also let the advanced users change the parameters to better reflect their research problem. In addition, it performs various statistical analyses and validation of the simulated data to guarantee data quality.

We are looking for someone who has experience in web server development, Python, HTML5, and databases to finish the development of the web server.

Hourly wages would be paid depending on the performance.

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