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Major: Software Engineering

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Research Area: Visualization/Computational Sciences

Researchers need to easily compare different simulation runs in order to understand the properties of large molecules. Through the use of visualization software, they are able to visually explore, verify, correlate and compare complicated shapes, structures and properties.

A software module will be created to enable scientist to simultaneously observe the evolution of large data sets calculated through molecular dynamics given a set of initial conditions that were calculated based on quantum mechanics. The data sets will primarily be those involving carbon nanotubes. Through this module multi-scale interactions will be identifiable.

Research Mentor:

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