VIRGINIA TECH

Solving Problems with Data Science at Virginia Tech

Summer REU 2022

Data Sciences Project:

Detection of Waterborne Contaminants (Vikesland Lab)

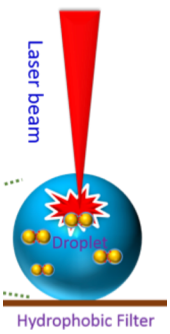
Project Description:

Novel technologies to detect waterborne contaminants are continually being developed and optimized. Students will deploy nanotechnology-based sensor platforms for the quantification of chemical and biological agents in surface-, drinking-, and waste-water. Analyte signals will be obtained using field deployable instrumentation and will be differentiated using statistical and machine learning based approaches.

Expected Qualifications of Students:

Students from STEM majors are expected. A basic understanding of chemistry and biology is desired.

Faculty Bio:

Dr. Vikesland is the Nick Prillaman Professor of Civil and Environmental Engineering at Virginia Tech. He received his B.A. in Chemistry from Grinnell College, and his M.S. and Ph.D. in Civil and Environmental Engineering from the University of Iowa.

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