



Engineering Modeler-Programmer Co-op (Summer 2022)

Battelle delivers when others can't. We conduct research and development, manage national laboratories, design and manufacture products and deliver critical services for our clients—whether they are a multi-national corporation, a small start-up or a government agency.

We recognize and appreciate the value and contributions of individuals with diverse backgrounds and experiences and welcome all qualified individuals to apply.

We are currently seeking a **Engineering Modeler-Programmer Co-op for Summer Semester 2022**. This position is located in **Columbus, Ohio**.

JOB SUMMARY

Battelle's Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Defense business, in our National Security Global Business, is currently seeking persons with knowledge of physical phenomena and who is programming savvy. The Hazard Modeling Team within CBRNE Defense provides its customers with technical analyses as well as modeling capabilities to inform their preparedness and response planning efforts to mitigate risk to the United States or their company. Successful applicants will have the opportunity to make this Nation and Battelle's clients better prepared and safer.

MAJOR RESPONSIBILITIES:

- Support model development activities for inhalation, ingestion, dermal, and radiation exposure hazards.
- Support model development activities for responding to hazardous events.
- Design and develop graphical user interfaces for mathematical models.
- Develop code to support database and back-end server interface.
- Test model code for accuracy and performance.
- Collect, reduce, process, and present model input and output data.
- Write reports of methods used and results obtained.

THE FOLLOWING IS REQUIRED:

- Currently enrolled in a bachelor's degree program in Engineering, Computer Science, Physics, Mathematics, Biology, or another scientific field.
- Minimum 3.0 GPA
- Completed coursework in higher-level mathematics (e.g., calculus, differential equations, linear algebra).
- Completed coursework in computer science and/or mathematical modeling.
- Experience using object-oriented programming in C++, C#, Java, or python for significant classroom assignments, undergraduate research, or other work experience.
- Ability to learn and understand new programming languages and mathematical concepts.
- Must be a U.S. Citizen with the ability to obtain and maintain a U.S. government security clearance)

THE FOLLOWING IS DESIRED:

- Computer science majors: coursework towards a minor, certificate, or emphasis in a scientific or mathematical field (e.g., statistics, data analysis, biology, engineering).
- Non-Computer science majors: coursework towards a minor, certificate, or emphasis in computer science, or undergraduate research requiring the use of object-oriented programming.



- Coursework in statistics or probability (at least one formal class).
- Coursework in engineering (e.g., transport phenomenon, reaction kinetics).
- Significant programming experience in an object-oriented programming language (e.g., C++, C#, Java, or python. MATLAB, LabVIEW, Mathcad, Mathematica would not be considered relevant experience).
- Experience with JavaScript/HTML/CSS.

LEGAL DISCLAIMER

The above statements are intended to describe the nature and level of work being performed by people assigned to this job. They are not intended to be an exhaustive list of all responsibilities, activities and skills required of staff members. No statement herein is intended to imply any authorities to commit Battelle unless special written permission is granted by Battelle's Legal Department.

As a condition of employment, Battelle will inquire about COVID vaccination status, and in the event that vaccinations are mandated at a work location (including client site and Battelle sites) we expect all candidates to comply with these required safety protocols.

Battelle is an affirmative action and equal opportunity employer. If a reasonable accommodation is needed to participate in the job application or interview process, to perform essential job functions, and/or to receive other benefits and privileges of employment, please contact recruiting@battelle.org.

BENEFITS

Battelle is an Affirmative Action/Equal Opportunity Employer and supports diversity in the workplace. Applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy), national origin, sexual orientation, gender identity or expression, marital status, age, genetic information, disability, veteran-status, or any other characteristic protected under applicable Federal, state, or local law. For more information about our other openings, please visit www.battelle.org/careers