Engineering Laboratory R&D Intern Position at Start-up Company
PARSEC Solutions LLC
March 2021 – December 2021
Purdue Research Park, West Lafayette

A) Primary function of position:
Perform assay development and testing of products to assist development in state of the art pharmaceutical particle engineering systems conducted in a start-up company environment.

B) Job Activities:
Primary responsibilities
- Develop, execute and troubleshoot laboratory assays; including Karl Fischer, laser diagnostic droplet and particle size measurement techniques.
- Develop laboratory Standard Operating Procedures (SOPs).
- Develop formulation chemistry and feedstock preparation processes.
- Assist in the operation of custom particle processing system.
- Perform data analysis.
- Coordinate testing requirements as needed.
- Work effectively with the development team

Secondary
- Assist with prototype hardware setup, operation and cleaning.
- Assist with the hardware development of prototype components.
  ▪ Atomizers/mixers/inertial separators/control systems.
- Work with the team to identify and implement continuous improvements to prototype systems.

C) Education and skills required:
- Enrolled in any of the Purdue science, engineering or technology programs in the fields of chemistry/chemical, pharmacy/pharmaceutical, mechanical, aeronautical, or agricultural/biological.
- Ability to follow Standard Operating Procedures (SOPs)
- ‘Hands-on’ laboratory experience with the ability to operate in a flexible R&D laboratory environment.
- Previous internship/Co-Op experience in pharmaceutica industry preferred.
- Experience working with analytical lab instrumentation preferred.
- Experience with data analysis programs a plus (Ex. jmp)
- Knowledge of basic fluid mechanics a plus
- Strong communication and writing skills in English.
- Prefer graduate level or well skilled Jr/Sr.

D) Time commitment:
  b. Majority of hours required between 8AM-5PM, at PARSEC facility in the Purdue Research Park, West Lafayette Indiana.