# PhD Position Opening
Computational Modeling of Polymer Matrix Composites for Extreme Environments

Overview. This project aims to elucidate the effects of high temperature on the initiation of cracks and accumulation of damage in discontinuous fiber-reinforced polymer matrix composites (DFR-PMC). These composites are light and durable, and are anticipated for high-temperature applications in aeronautical components such as nacelles, fan cases, or engine compressor stages. DFR-PMCs provide design flexibility in molding while reducing weight and cost, improving fuel efficiency and decreasing emissions.
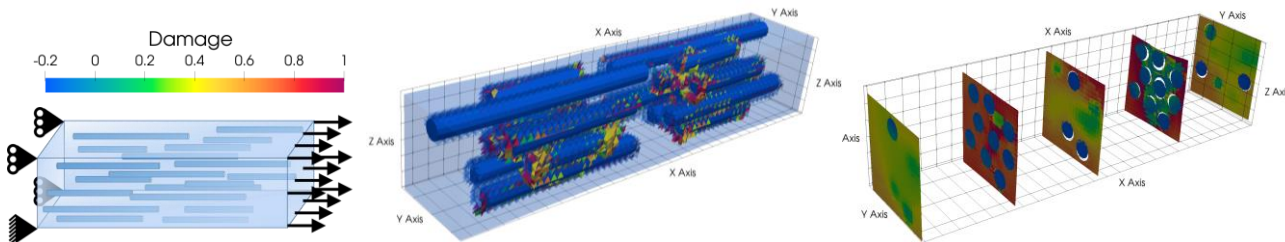
The positions include a summer internship at the **Air-Force Research Lab** for the interested candidate. The ideal candidate will be proficient in solid, damage, and computational mechanics, with a strong interest in the mechanics and physics of composites. Coding experiences would be appreciated.

Advisor: Prof. Maryam Shakiba (Civil and Environmental Engineering)
Duration: 3 years, starting in Spring 2020.
Location: Virginia Tech campus at Blacksburg, VA., U.S.A.
Salary: Full funded GRA position.

To apply: Send CV, transcripts, and letter of motivation to mshakiba@vt.edu