



VIRTUAL ENGINEERING

The Virtual Engineering Lab at the National Institute for Aviation Research provides research focused in the development and application of numerical methods in areas of Crashworthiness, Injury biomechanics, Structures, Numerical Optimization Techniques, Virtual Product Development and Certification.

→ PROJECTS

- FAA - Certification by Analysis
- FAA - Certification by Analysis of Aircraft Interiors
- FTA - Certification by Analysis full scale
- FTA - Certification by Analysis
- NIAR/Industry/State - Bird Strike Numerical Model Development and Validation
- FAA Assure - Ground collision severity evaluation applications
- FAA Assure - Airborne collision severity evaluation
- NASA - Advance Composites Consortium (ACP)
- High energy dynamic impact
- Navy - I predict - digital human body modulation and its application to improve aircraft rediness and occupant survivability

→ COMPUTATIONAL RESOURCES

- 38 20 Core Workstations (760 Cores)
- HPPC Cluster A: nodes (640 Cores)
- HPPC Cluster B: nodes (292 Cores)
- Data Storage System 1.2 PB
- Secure Area/Data Access

→ CONTACTS

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