

EXPERIENCE INNOVATION



**EPSILON**

Company Brief

# About Epsilon

## Company Mission

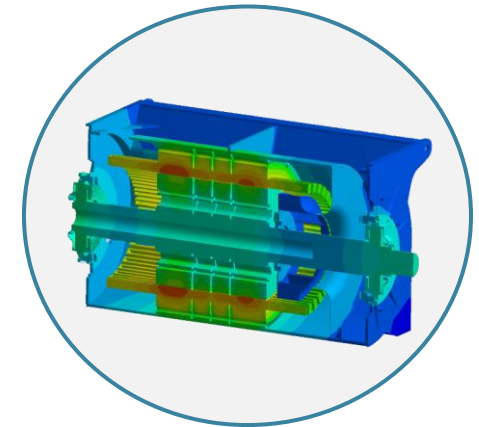


## Our Core Values

Epsilon FEA was formed in 2008 in Minneapolis, Minnesota to provide a new class of Engineering Service utilizing the Finite Element method and related CAE tools.

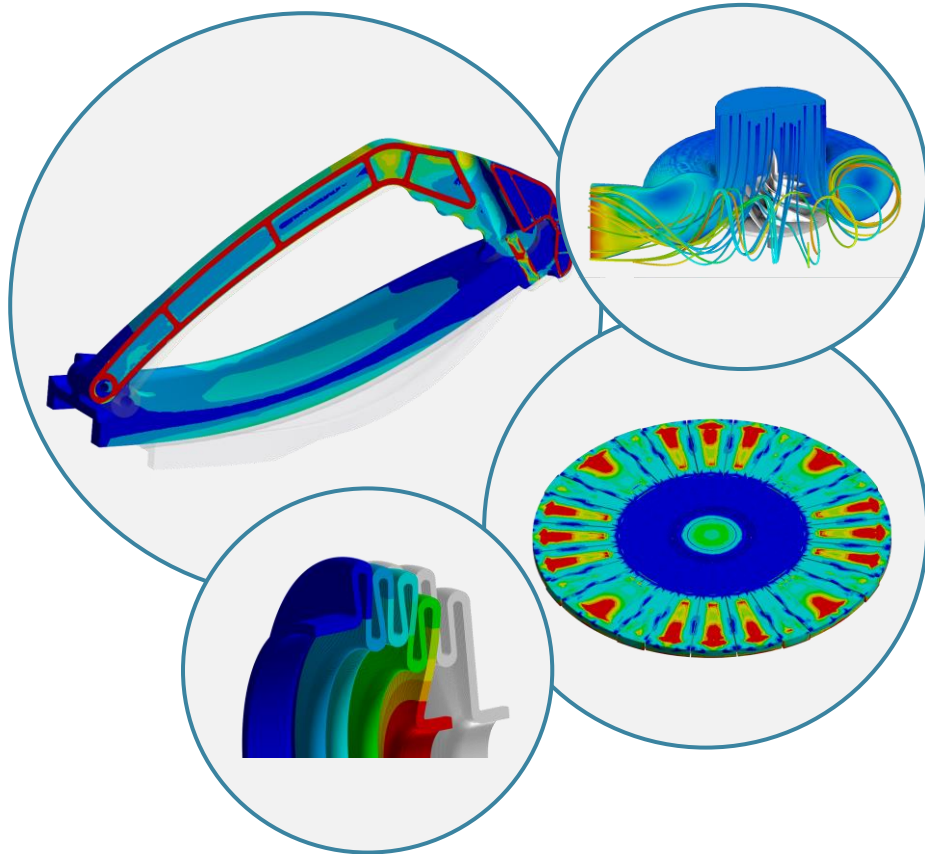
Recognizing this niche CAE tool requires large investment for companies competing in a technically challenging environment, Epsilon focuses on three cumulative characteristics of our services:

- ✓ **Exhibit Excellence with the Simulation Tools**
- ✓ **Infuse Technology into Customer Design System**
- ✓ **Communicate Thoroughly and Clearly**



# What We Do

## Our Tools



We utilize ANSYS tools both of Workbench as well as classic APDL (ANSYS Parametric Design Language) Fluent, CFX, along with a multitude of supporting engineering and business software.

Using up-to-date licensing and compute solvers we leave your costly internal resources intact, while leveraging our familiarity and expertise with our own in-house toolset that has been customized and augmented for over a decade and a half.

Pairing these long term investments with analysts (consultants) that perform FEA/CFD as their career focus results in a low total project cost thereby making Epsilon FEA a strategic partner for your next engineering challenge.

# Why Epsilon?

Unique Value Proposition to Best Serve Our Customers



## Superior Engineering Analysis

- 3 full-time simulation experts + network of additional experts as needed



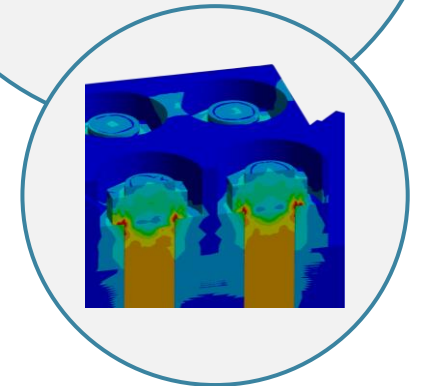
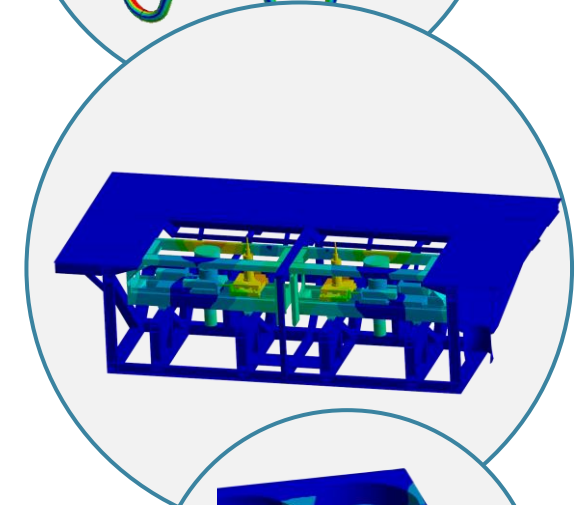
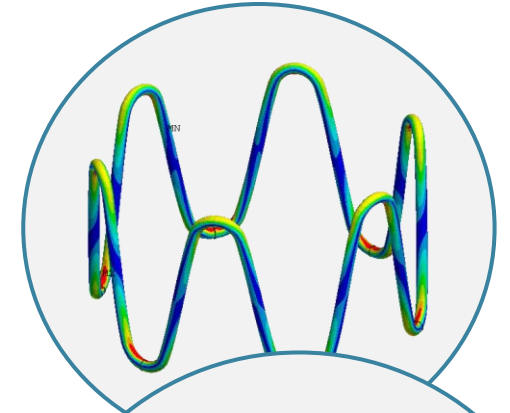
## Low Overhead

- Support functions outsourced
  - Accounting, IT, Finance, Technical writing, etc.
- Big Business Interface
  - Detailed invoicing/SOWs, updated toolset, insured, quality assurance, etc.



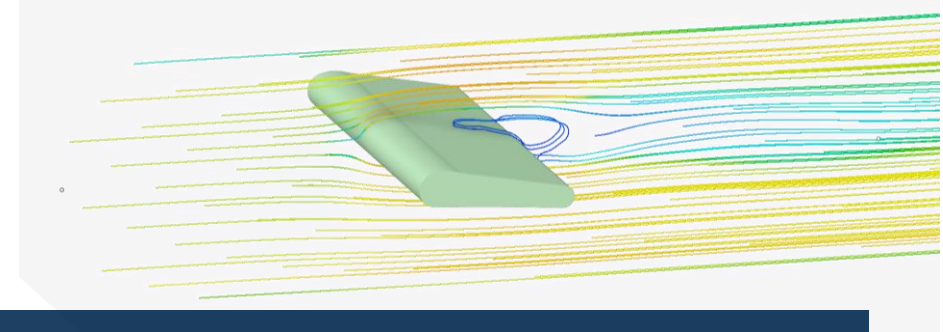
## Small Business Service with Single Points of Contact

- Rod's Cell Phone: 612-819-5288



# Who Do We Serve?

## Our Customers

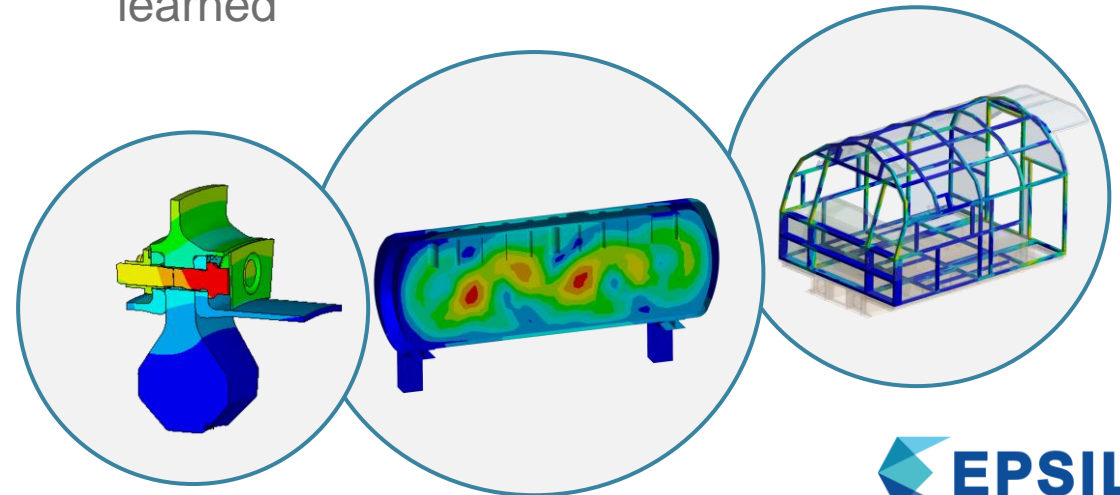


### Load-Leveling

- Analyst is a team member, not a black box
  - Interface with same Epsilon analyst to leverage past experience
- Open and frequent communication
- Any new FEA methods/lessons learned are **well communicated**
- Schedule/budget fidelity with frequent status updates
  - Achieved by using the right person, tools, and technical approach

### External Expertise

- We infuse up-to-date FEA methods/tools
  - Leverage other industries' FEA innovations
- We are not a software reseller
  - Unbiased tool selection, infrastructure advice
- We share our knowledge, files, and lessons learned



# Epsilon's Customers

Proudly served dozens of companies across numerous industries



# Epsilon's Unique Capabilities

Expertise and Technology to Ensure Accuracy and Affordability



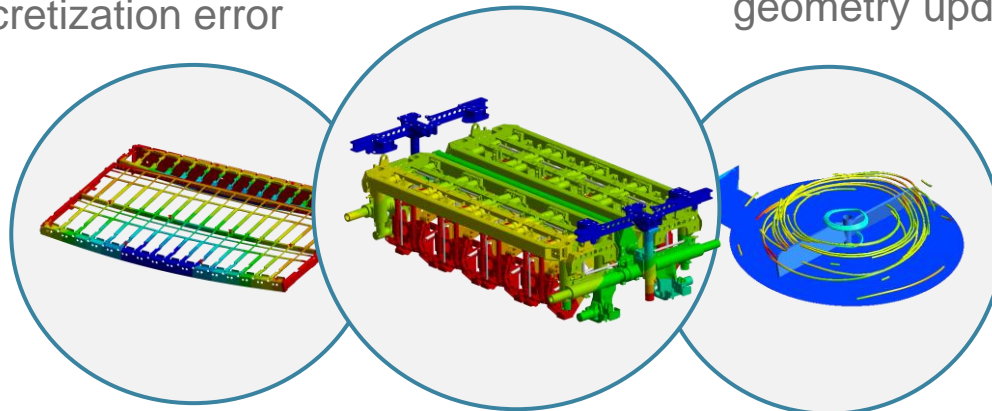
## Accurate Simulation

- In-depth knowledge of tools
  - ANSYS® Suite of Multi-Physics software
- Experience with industry successes/failures
  - Aerospace, Rotating Machinery, Electronics, Manufacturing, Packaging, etc.
- Validation with calibration runs and hand-calcs
  - Experience assessing discretization error



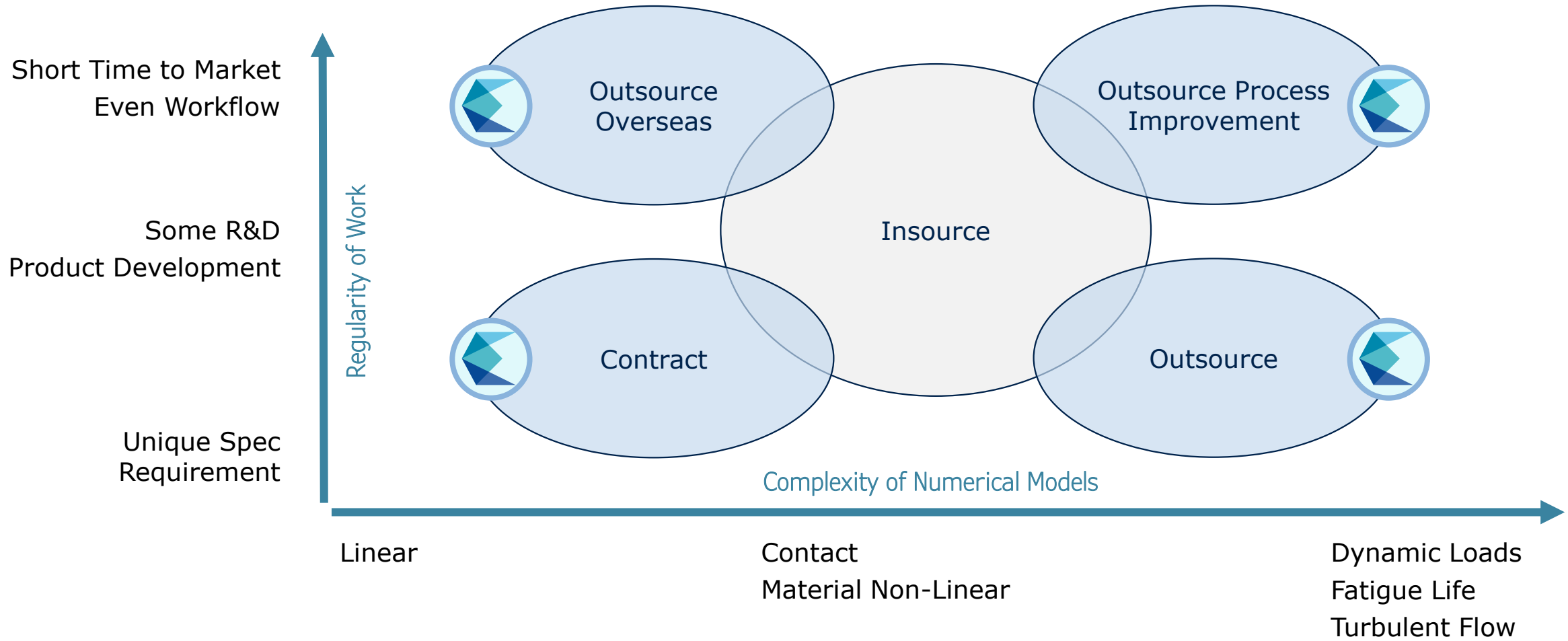
## Affordable Simulation

- Low hourly rates and/or fixed-price estimates
- Specialized, experienced engineers
- Detailed statements of work, scope, and budget tracking
- Automation (APDL, CAD-associativity)
  - Accommodates shifting inputs, materials, minor geometry updates, etc.



# How You Can Partner with Epsilon

Outsource the corners, while keeping the expertise central





# Epsilon vs. Contract Employees

How we are differentiated to provide a top-tier service

## Tailored Skillsets

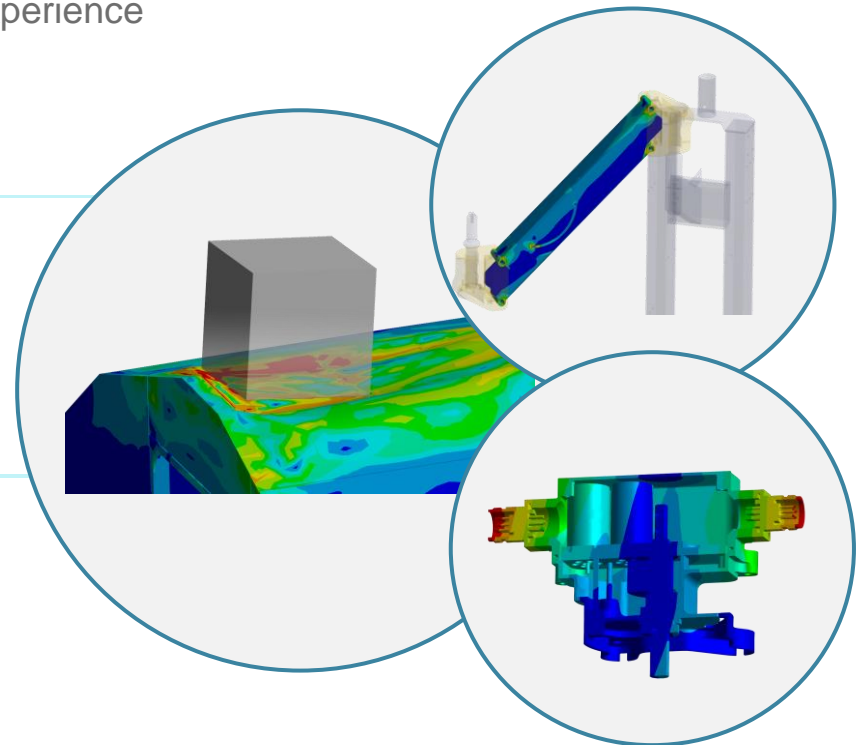
- Using Epsilon means having multiple skillsets and being assigned the analyst best suited to your individual needs
- Staffing firms often offer inflated resumes that do not accurately depict FEA experience
- Epsilon analysts do FEA full time
- ITAR registered / can accept multiple CUI types

## Long-Term Continuity

- Starting over with each new contract hire hurts quality and cost
- Epsilon leverages experience with your product and methods

## Cost-Effectiveness

- Pay only for hours spent directly on your project
- Avoid budget creep with Epsilon's not-to-exceed quotes
- Tasks itemized with estimated cost and delivery date



# Epsilon's CEO and Founder

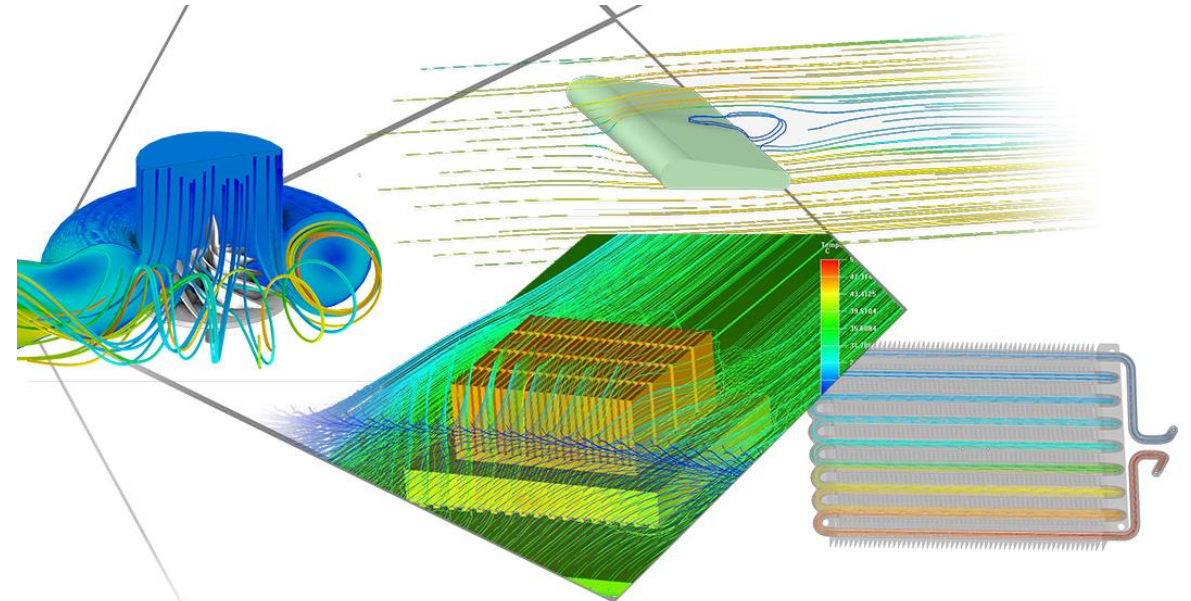
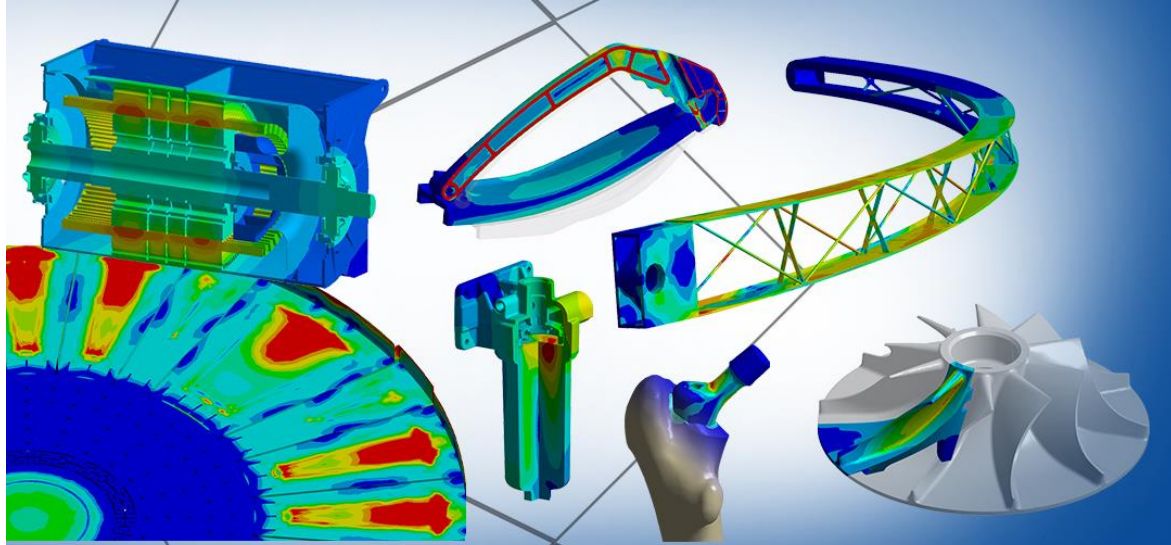
Rod A.A. Scholl | Principal Analyst



- **25 years with ANSYS FEA as Primary Function (20,000 + hours)**
  - Skilled with nonlinear convergence including, plasticity, contact, high deformation, modal, vibration, spectrum, PSD, seismic, shock, harmonic, dynamic transients, heat transfer, mass-transport, radiation, optimization, automation (APDL) and more... (Classic and Workbench)
- **Variety of Industry Experience**
  - Aerospace, Automotive, Manufacturing, Electronics, Packaging, Semiconductor, Biomedical, Power Generation, etc.
- **Strong Leader with Demonstrated Communication Skills**
  - Experienced Leader, Team Facilitator, and Mentor
    - Accustomed to learning new design processes, regulations, reporting formats, and closely integrating with your team members
    - Experienced providing close technical oversight of 3-4 analysts
  - Mentored Honeywell user community of 100+ analysts
    - Established and implemented annual training plans, provided tech. support, one-on-one help, user meetings, collaboration and customization tools, etc.
  - Creator and Chief Editor of ANSYS Focus for 5+ years
    - >2000+ opt-in subscriptions to online magazine

# Hundreds of Previous Simulations

Across many sectors, and physics domains



 EPSILON

EXPERIENCE  
INNOVATION

KNOW  
YOUR FLOW



# Thank You

Any Questions?