

# Zemax

EPIC Online Technology Meeting on Freeform Optics for  
AR/VR

Chris Normanshire

[Chris.Normanshire@Zemax.com](mailto:Chris.Normanshire@Zemax.com)

## Zemax portfolio of products

# Zemax

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OpticStudio<sup>®</sup>

Everything you need to  
design optical systems

OpticsBuilder<sup>™</sup>

Shorten time to build by bringing  
optical designs into CAD

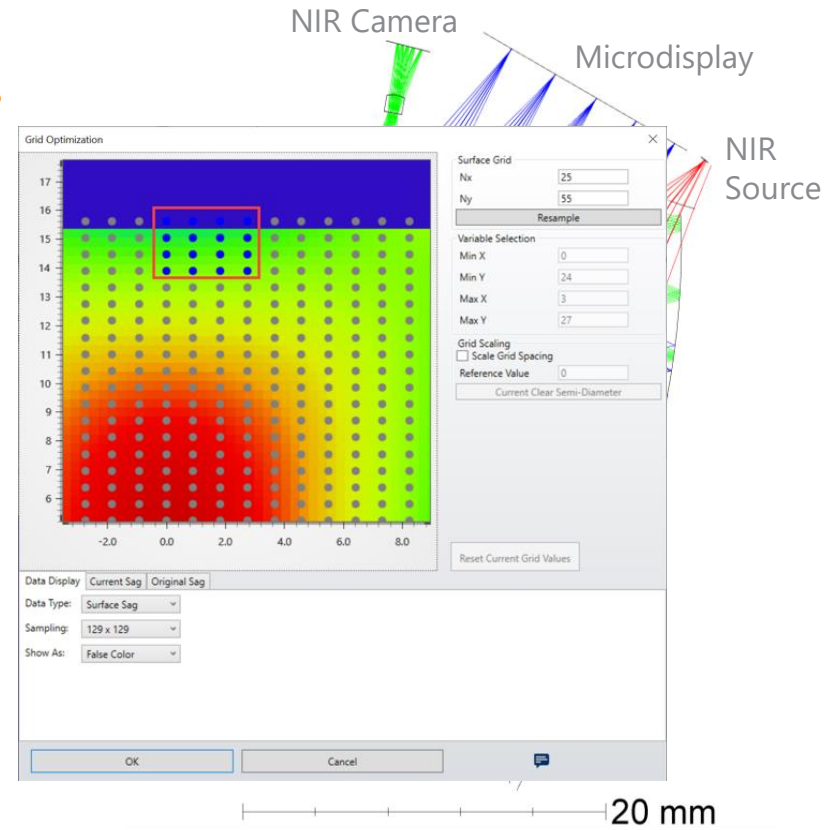
OpticsViewer<sup>™</sup>

Share a common language  
from design to build

# Zemax for freeform design

- Flexible characterization of freeform optics

- Parametric polynomial models
  - extended polynomials, Zernikes, Forbes Q-freeform, off-axis conic extended polynomial (Sasian)
- TrueFreeForm™
  - Grid-based surface model
  - Novel surface shapes
  - Spatially selective design
  - Efficient use of symmetry



# Zemax for freeform design

- Performance analysis

- Aberrations across full field of view
- Simulated images

- Design for manufacture

- Control key manufacturability constraints, including local surface slope
- Point cloud data export

