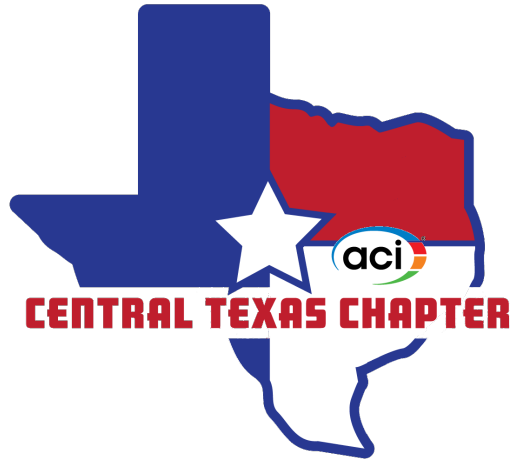




Professional Development Hours (PDH's)

Various States have established the PDH as a requirement for professional license renewal. Typically, this is a self-certifying requirement. Attendees have a personal responsibility to assess the applicability of attended program elements to their professional development. Attendees are encouraged to consult their state licensing board to answer any questions regarding PDH credits. Attendees are hereby advised that neither The Central Texas Chapter of The American Concrete Institute nor the participating speakers guarantee compliance of the individual program elements with the qualifications established by individual State licensing boards.

Certificate of Attendance

This Certificate Documents That

**has attended the following presentation sponsored by the
Central Texas Chapter of the American Concrete Institute**

Thursday, May 9, 2024

via in-person meeting

11:45 PM – 12:45 PM

AI and Concrete; Speaker:

by Ryan Henkensiefken, Concrete.ai

Ryan is a professional engineer with a background in low-carbon concrete design having led teams that focused on concrete design, engineering, business development, and sales within the ready-mix concrete industry. Concrete.ai has developed a novel approach for concrete design by utilizing artificial intelligence and machine learning to optimize mix designs for a lower global warming potential or a reduced cost. Ryan's focus at Concrete.ai is to help implement their AI-assisted software with concrete producers and building owners to help them reduce the carbon footprint of concrete products to meet carbon reduction commitments while maintaining competitiveness in the market.

The dynamic nature of the ready-mix industry; constant raw material price changes, raw material availability, thousands of mixes with unique characteristics, massive amounts of disconnected data from multiple sources creates interesting challenges for producers to manage their mix designs. Artificial intelligence (AI) assisted design provides a unique opportunity to manage these challenges by doing what AI does best – to take enormously, complex data and process it in real-time – with the best of what experienced engineers and concrete professionals offer – human judgement and experience – creating a new pathway to optimized mix designs.

Charles Hammond
ACI President 2024
Central Texas ACI Chapter