

## Nathan R. Vandike

**Nathan R. Vandike** is the recipient of the 2023 Sunkist Young Designer award for exceptional engineering contributions in the design, innovation, and technology advancement of crop harvesting equipment.

Vandike is a staff engineer in crop harvesting advanced engineering with John Deere Global Crop Harvesting. He focuses on new technology development and design, intellectual property protection, agricultural systems engineering, innovation of automation and sensing applications for harvesting systems, and engine air and cooling systems. He also develops and defines concepts of operation and system requirements for technology projects. He is a leader in concept design and feasibility evaluations for advanced sensing and automation systems and defines intellectual property protection strategies for technology development projects.

Vandike is an innovator committed to delivering customer value. Demonstrating his engineering and project leadership capabilities, Vandike led the production implementation of engine platforms for 14 unique models of W600, T600, and the S600 series combines in the US, Germany, and Brazil. Following this experience, he joined an advanced configuration team with responsibility for several harvesting sub-systems, developing clean sheet concepts for crop harvesting equipment including the S400 rotary combines in Brazil and the X9 harvesting solution. Continuing to apply his engineering skills to harvesting systems, Vandike led advanced technology integration into combines and front-end equipment, including automation and sensing systems featured in the S700 and X9 harvesting systems. Recognized as a passionate leader in systems engineering and intellectual property strategy, Vandike mentors other engineers across the globe and from other production system steps in delivering solutions to meet customer needs.

A 21-year ASABE member, Vandike has been a member of an engineering team that has won three AE50 product awards. He has also received a number of John Deere Innovation awards, the John Deere SMART Co-Creation Series Hackathon First Prize, and the Outstanding Performance award from the John Deere Global Crop Harvesting Product Development Center.

Vandike continues to develop innovations in crop harvesting solutions. He has 21 US and European patents related to crop harvesting engine applications, crop harvesting sensing systems, crop harvesting and ag equipment automation control systems, and an additional 93 patents pending. His enthusiasm for engineering extends beyond the office, as Vandike leads the local TrailLifeUSA troop, bringing education and application of engineering concepts to youth of all ages, hoping to inspire the next generation of innovators.