## **SEMINAR SERIES**

# DATA SCIENCE & DIGITAL AGRICULTURE





### **AARON AULT**

#### **GOGT: Data architecture that works**

In Data Driven Agriculture (and any data-related field), data architecture is becoming critical in research data sets/streams as well as "real-world" production settings. A well-designed architecture reduces the effort involved to fetch/feed/ping just the data you want rather than sifting through and synchronizing large sets of unwanted data. A well-designed architecture (with accompanying infrastructure) also facilitates privacy, controlled sharing, concurrency, selective synchronization, and front-end app development.

Aaron Ault, Purdue Research Engineer in Electrical and Computer Engineering, is also "chief data architect" of the Purdue Open Ag Technology and Systems Center. His expertise as a computer engineer and coder is a very unique complement to also being a crop and livestock farmer – his other day job. Aaron is a very popular (and energetic!) speaker and has had audiences with corporate CEOs, the Secretary of Agriculture, funding agencies, and, of course, farmers and industry practitioners.

In this seminar, Aaron will present a data architecture that can work well for lots of ag-related data. We refer to it as Graph-structured, OADA\*-delivered, Geohash-indexed, and Time-Indexed (GOGT). The seminar will be a presentation of what GOGT data enables (certainly including making data more Findable, Accessible, Interoperable, and Reusable) and will also include some technical teaser aspects for developers who have interest in managing and integrating data streams from multiple systems. Attendees will see that this architecture also has application to fields other than agriculture.

\*OADA, the Open Ag Data Alliance API is a development of the OATS Center.

#### **WHEN & WHERE**

Friday, January 31, 2020 8:00 a.m. to 9:00 a.m. PFEN 241 – Deans Auditorium

