

# YANG WANG

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## EDUCATION

<b>Purdue University, West Lafayette</b> Ph.D. in Electrical Engineering <i>Thesis: Design and Implementations of Open-Source Ag IoT Devices for Farm Machinery Data Acquisition and Integrated Analytics</i>	Aug. 2015 – Jun. 2021
<b>Purdue University, West Lafayette</b> B.S. in Electrical Engineering	Aug. 2010 – Dec. 2014

## EXPERIENCE

<b>Climate LLC</b> <i>Senior Data Scientist</i>	Nov. 2022 – Present <i>St Louis, MO</i>
• Lead the development and the release of a production Python package that processed ag machine data with an image processing technique into a geospatial layer that was validated to be more accurate and efficient to use than the existing production layer.	
• Collaborated with members from cross-functional teams. Designed, implemented, and demonstrated a new customer-facing feature in a PDF report form in a 2-month time span.	
• Identified potential speakers across the org as a tech talk committee member to coordinate with presentation schedules and facilitate talks.	
<b>John Deere Intelligent Solutions Group</b> <i>Senior Navigation Engineer</i>	Jul. 2021 – Oct. 2022 <i>Torrance, CA</i>
• Refactored legacy codebases and improved navigational algorithms for weak GNSS signal environments.	
<b>Purdue University</b> <i>Graduate Research / Teaching Assistant</i>	Aug. 2015 – Jun. 2021 <i>West Lafayette, IN</i>
• Performed extensive research in processing GNSS tracks from ag machinery with Kalman filtering and spatiotemporal clustering algorithms for harvest productivity analyses across multiple years and machines.	
• Well-versed in reverse-engineering ISOBUS/CAN data for contextual information extractions and analytics.	
• Architected and developed an open-source telematics unit for automatic CAN/GNSS/video data collection based on Yocto Linux. Deployed 10+ such units domestically and internationally through coordinations with growers and machine operators.	
• Presented various posters and presentations in various academic symposiums and ASABE conferences.	
<b>Spensa Technologies Inc. (Acquired by DTN)</b> <i>Embedded Systems Engineer</i>	Jan. 2015 – May. 2015 <i>West Lafayette, IN</i>
• Implemented embedded firmware for new base station launch.	
• Assisted in new base station adapter board PCB design and layout.	

## CORE COMPETENCIES

<b>Programming Languages</b>	Python, C, C++, MATLAB, Shell, L <sup>A</sup> T <sub>E</sub> X, Java, Javascript
<b>Programming Tools</b>	Geospatial suite (geopandas, shapely, pandas, numpy)
<b>Parallel Processing</b>	PySpark
<b>Programming Environments</b>	Vim, Visual Studio, Android Studio, Vector CANoe
<b>Embedded Systems</b>	Yocto Linux, Android, ISOBUS VT
<b>Version Control Systems</b>	Git, Team Foundation Server
<b>Network &amp; Messaging Protocols</b>	CAN, J1939, ISOBUS, MQTT, Kafka
<b>Databases</b>	MySQL, TimescaleDB
<b>Languages</b>	English and Mandarin (fluent), French (limited)