# Joseph Oboamah

1621 NW 51st St
Lincoln, Nebraska, 68528
jdoboamah@gmail.com
(402) 613-4185
https://www.jdoboamah.net

## Summary

As a seasoned Computer Science professional specializing in IoT in agriculture, I am actively seeking a dynamic role where I can leverage my technical expertise to contribute to cutting-edge and sustainable solutions. Motivated to pursue a Master's in Biological Systems Engineering, my track record reflects a commitment to excellence and a genuine passion for technology. Currently employed as a Software Developer, I am dedicated to making impactful contributions at the intersection of technology and agriculture throughout my academic journey. using technology.

## Key Skills

- JavaScript (Angular)
- React
- Node.Js
- Python
- HTML/ CSS
- REST APIs
- SQL (MySQL, MySQL Workbench)
- C/C++
- Java
- Machine Learning
- LoRa/LoRaWAN

## Education

Bachelor of Science in Computer Science (September 2020 – May 2023)

University of Nebraska- Lincoln at Lincoln, NE

Associate of Science in Computer Science (September 2017- August 2019)

Western Nebraska Community College at Scottsbluff, NE

## Honors & Awards

Farm Foundation Cultivator (June 2023)

Farm Foundation- Chicago, IL

Global Laureate Scholarship (2020- 2023)

University of Nebraska- Lincoln, Lincoln NE

Division of Business and Information Technology Award (2018 – 2019)

Western Nebraska Community College, Scottsbluff NE

Pinnacle Award (April 2019)

Western Nebraska Community College, Scottsbluff NE

## Professional Experience

### Software Developer

Pierson Wireless | October 2023- Present

- Developed and maintained internal company applications using React and Node.js, catering to a user base of over 150 employees.
- Utilized cutting-edge technologies to create responsive and user-friendly interfaces, enhancing overall user experience.
- Collaborated with cross-functional teams to gather requirements, analyze user needs, and translate them into technical specifications.
- Participated in daily scrum meetings to ensure effective communication and collaboration among the development team, ensuring project milestones were met.
- Implemented strategies for application scalability to accommodate the growing user base.

- PHP
- AWS
- Azure
- Communication skills
- Organizational know-how
- People skills
- Collaboration talent
- Problem-solving abilities

### Irrigation Engineering Intern

Panhandle Research & Extension- UNL | November 2019- Present

- Developed in-house web app using Angular, HTML/CSS that allowed farmers and researchers to manage and monitor farms.
- Designed and implemented fast data fetching and rendering logic to speed user interactivity on the web app.
- Managed the backend server running Debian Linux 9 operating system.
- Built a LoRaWAN camera sensor node using Raspberry Pi.

### Summer Intern – Robotics for Research in Agriculture

Panhandle Research & Extension- UNL | May 2019- July 2019

- Designed a robot to autonomously maneuver through corn fields using ultrasonic sensors and image recognition to gather crop data.
- Programmed a software interface for the extraction of data collected by the robot.
- Processed images taken by the robot to calculate canopy cover percentage to determine plant growth and plant health.

## Publications & Presentations

Liu, L., Qiao, X., Liang, W., Oboamah, J., Wang, J., Rudnick, D. R., Yang, H., Katimbo, A., & Shi, Y. (2023). An Edge-computing flow meter reading recognition algorithm optimized for agricultural IoT network. Smart Agricultural Technology, 5, 100236. https://doi.org/10.1016/j.atech.2023.100236

Liang, W., Oboamah, J., Qiao, X., Ge, Y., Harveson, B., Rudnick, D. R., Wang, J., Yang, H., & Gradiz, A. (2023). CanopyCAM – an edge-computing sensing unit for continuous measurement of canopy cover percentage of dry edible beans. Computers and Electronics in Agriculture, 204, 107498. https://doi.org/10.1016/j.compag.2022.107498

ASA/CSSA/SSSA Annual Meeting- Salt Lake City, UT (2021)

ASABE Annual International Meeting- Omaha, NE (2023)