Tobi DeRuiter

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EDUCATION

Purdue University **West Lafayette, IN**
BS, Computer Science & Robotics Engineering Technology, 3.50 GPA *Expected Dec 2024*

EXPERIENCE

The Rush Market **Omaha, NE**
Online Inspector *May 2018 – July 2018, May 2021 – Aug 2021, May 2023 – Aug 2023*

- Inspected newly sourced returns for quality and condition to be represented online
- Validated product data attributing within back-end system for representation directly to the customer online

The Rush Market **Omaha, NE**
Computer Science Intern *May 2022 – Aug 2022*

- Researched Azure and TensorFlow machine intelligence for The Rush Market's inspection process
- Prototyped a web app on Heroku that uses Azure speech-to-text to enhance the inspection process
    - Implemented custom hashmap data structure to store and execute voice commands
- Developed back-end system to notify employees of a customer pick-up through text by implementing Twilio
- Researched and assisted in beginning development of computer vision to automate cycle counting/auditing

University of Nebraska at Omaha **Omaha, NE**
Application Developer Intern *May 2019 – Aug 2019*

- Worked with a programming team to aid a UNO Computer Science Professor in creating a mobile app
    - Developed mobile app "MIS Flood" for iOS and Android
    - Researched and applied most efficient ways to program and animate objects in Unity Game Engine
- Programmed operations and animations in C#; worked with Unity Game Engine and Visual Studio

ACTIVITES

Boiler Robotics Club (BRC) **Purdue University, West Lafayette, IN**
BRC Mechanical Team Member *August 2021 – December 2023*

- BRC builds a Mars rover that competes in the University Rover Challenge (URC)
- Working in a team to design, build, and program the robotic arm (used in retrieval and servicing in URC)

Fluid Power Club (FPC) **Purdue University, West Lafayette, IN**
FPC Electronics Team Member *August 2023 – Current*

- FPC designs and builds a bike to compete in the NFPA Fluid Power Vehicle Challenge each year
- Working in a team to design and build the electronics system to monitor and control the FPC bike
    - Monitoring system pressures and bike speed; Controlling pneumatic clutch with solenoids

SKILLS & INTERESTS

- **Specific Skills:** Coding: Python, Java, C++, C#; CAD (Autodesk & Solidworks); GD&T; 3D Printing; ROS (Robot Operating System); Raspberry Pi; Arduino; MS Office; Leadership; Teamwork; Communication; Problem Solving; Organization; Time Management; Public Speaking; Analysis; Strategic-Thinking
- **Interests**: Martial Arts; Climbing; Calisthenics; Gaming; Dungeons & Dragons; Space; Robotics; Computer Science; Artificial Intelligence; Machine Learning
- Using my own 3D printer to create robots and enhance products I buy by utilizing Raspberry Pi controllers and/or Arduinos to add more functionality.