

# TOBI DERUITER

Software and Robotics Engineer

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linkedin.com/in/tobi-deruiter West Lafayette  
☆ Non-binary (they/them)

## EDUCATION



BS, Computer Science & Robotics  
Engineering Technology

07/2020 - 12/2024

Purdue University

West Lafayette, IN

GPA | 3.5 / 4.0



Semester Abroad

01/2023 - 05/2023

University of New South Wales

Sydney, Australia

## EXPERIENCE

Computer Science Instructor

07/2024

Coding Mind Academy

West Lafayette, IN

- Prepare a curriculum to instruct 1-3 middle to high school students each class both online and in person
- Teach 2 to 5 classes a week ranging from beginner to intermediate levels in C++, Python, Python: Pygame

Computer Science Intern

05/2022 - 08/2022

The Rush Market

Omaha, NE

- Prototyped a web app on Heroku using Azure speech-to-text to enhance Rush Market's inspection process
- 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

Application Developer Intern

05/2019 - 08/2019

University of Nebraska

Omaha, NE

- Created mobile app for iOS and Android in Unity in a team of 2 interns and a graduate student
- Programmed operations and animations in C#
- Worked with Unity Game Engine and Visual Studio

## ACTIVITIES

Fluid Power Club (FPC)

08/2023 - 05/2024

Purdue University

FPC designs and manufactures a bike to compete in the NFPA Fluid Power Vehicle Challenge each year

- Designed and implemented an electronics system in a team of 4 to monitor and control the FPC bike
- Researched and tested 4+ sensors and 2 controllers while adhering to NFPA standards and requirements

Boiler Robotics Club (BRC)

08/2021 - 12/2023

Purdue University

BRC works to construct a Mars rover to compete in the University Rover Challenge (URC)

- Designed, built, and programmed a robotic arm in a team of 5 to 6 students (for retrieval and servicing in URC)
- Programmed in ROS (Robot Operating System) to utilize inverse kinematics; Solidworks used for design

## SKILLS

Programming Languages

Python · Java · JavaScript · C · C++ · C# ·

HTML · CSS · Bash

Related

3D Printing · Android · Autodesk · Azure ·

Bash · Computer Vision · Firebase · Heroku ·

HTML · Linux · Machine Learning ·

Raspberry Pi · Robotics · Solidworks · Twilio ·

Unity · Visual Studio · NodeJS · Express ·

Frontend · Backend · Full Stack ·

Robotic Operating System

General

MS Office · Teamwork · Communication ·

Problem Solving · Organization ·

Time Management · Public Speaking ·

Analysis · Strategic Thinking · Presentations

## PASSIONS

🏔 Climbing

🥋 Martial arts

🎮 Video games

🎵 Music

🐉 Dungeons & Dragons