

Luke Yang

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EDUCATION

University of Michigan

BSE in Computer Science and Engineering, Minor in Mathematics

GPA – 3.92/4.00

Ann Arbor, MI

August 2021 – Present

- University Honors/Awards: Three term engineering Dean's Honors List (higher than 3.5 GPA), William J. Branstrom Freshman Prize (placed in top 5% of Fall 2021 freshman class)
- Coursework: Introduction to Programming and Data Structures, Discrete Mathematics, Linear Algebra, Data Structures and Algorithms, Foundations to Computer Science, Calculus

EXPERIENCE

MRover

Software Member - Autonomy

Ann Arbor, MI

May 2022 – Present

- Constructed a 3-D workspace utilizing computer vision and machine learning tools to simulate rover movement and spacial recognition
- Designed a pathing algorithm with both Python and C++ using environmental simulations to calculate optimal routes
- Won the University Rover Challenge 2022 competing against over 35 international teams. Adapted rover development to complete four unique events without failure

MASA

Avionics Team Member

Ann Arbor, MI

August 2021 – January 2022

- Researched IC implementation in rocket technology to provide inspiration for team design strategy
- Modeled four potential PCB designs in CAD software to write embedded firmware

Panera Bread

Associate

Plymouth, MI

June 2021 – August 2021

- Adapted a professional presence by spending over 255 hours of work diligently assembling sandwiches with accuracy and precision
- Memorized over 40 menu recipes to quickly construct food items in high-pressure situations
- Trained four new employees in restaurant procedures to foster workspace efficiency
- Communicated a friendly, approachable atmosphere to establish relationships with over 80 customers

Red Wagon Project

Volunteer

Westland, MI

May 2019 – August 2020

- Distributed books, learning supplies and living necessities in collaboration with local community centers using small, red wagons and other vehicles
- Taught over 30 children reading strategies to inspire newfound learning interests and creative thinking
- Directed other volunteers via pre-determined routes to reach over 65 families in low income and minority neighborhoods
- Organized resources and books after delivery process to ensure enough supplies remained for following deliveries

PROJECTS

Self-Powered Plant Watering System

University of Michigan

- Led a three-member group in creating a hydration system to provide self-sustaining preservation for a collection of natural organisms
- Supervised research process of different types of solar power technologies to efficiently harvest solar energy with a Sunny Buddy energy transformer
- Developed Arduino software to remotely connect a central device with external equipment via Bluetooth
- Revised a budget leading to a 25% reduction in excess spending. Administered extra funds to upgrade existing equipment to higher quality components
- Incorporated a schedule to assign responsibilities to each individual member

SKILLS

- C++, C, Python, Java, Git, MATLAB, Microsoft Office, Blender, ROS, CAD, Object Oriented Programming
- Languages: Fluency in Mandarin Chinese, Basic understanding of Spanish