# **Ziteng Jiao**

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#### **EDUCATION**

**Purdue University** 

West Lafayette, IN

Expected May 2022

Bachelor of Science in Computer Science, Mathematics

• Overall GPA: 3.92/4.0, Major GPA: 3.96/4.0

• Awards: Dean's List & Semester Honors (2018 - 2021)

I will continue studying in graduate school beginning Fall 2022

## RESEARCH EXPERIENCE

### Research Assistant, Purdue University

West Lafayette, IN

"CAM2 - Auto Drone" Research Team

Aug. 2021 - Present

- Develop the Sample Solution, Referee System, and website for the 2022 IEEE Autonomous UAV Competition.
- Perform multi-class multi-object tracking research using Optical Flow and integrating high-efficiency computer vision algorithms on a low-power computer to achieve real-time object tracking and image recognition to control drones.
- Keywords: Computer Vision, Object Tracking, Unmanned Aerial Vehicles, Artificial Intelligence, Website Development.

## **Research Assistant, Purdue University**

"Precision Dairy" Research Project

West Lafayette, IN

May 2021 - Present

- Develop scripts with Python, Pandas, and SQL for Animal Scientists to analyze the physiological, behavioral, health, and production indicators on individual animals to improve the welfare, productive efficiency, and longevity of Indiana's Holstein cattle herds.
- **Keywords:** Data Analysis, Data Mining, Database Management, Data Ingestion.

#### Team Co-Leader, Purdue University

West Lafayette, IN

"CAM2 - Drone Video" Research Team

Jan. 2021 - Aug. 2021

- Co-led a team of 15 undergraduate students to organize the 2021 IEEE Low-Power Computer Vision Challenge.
- Developed an open-source <u>Sample Solution</u> for the competition as the qualification of the challenge based on YOLOv5 and DeepSORT.
- Developed an Autonomous Referee System with Python that can automatically communicate with the executing hardware (Raspberry Pi) and power measurement equipment to calculate the accuracy and score of submissions and post the score on the public scoreboard on the competition website.
- Developed the competition website for solution submission and results display with Django and Bootstrap.
- Attracted 53 teams from all around the world to submit 366 solutions to the two tracks of the competition: (1) using PyTorch running on Raspberry 3B+ to track multiple moving objects in videos and (2) using Xilinx FPGA to recognize objects in images.
- Keywords: Computer Vision, Object Tracking, Computational Efficiency, Artificial Intelligence, Website Development.

## **Research Assistant, Purdue University**

West Lafayette, IN

"Long Term Care Analytic" Research Project

Sep. 2020 - Dec. 2020

- Collected and cleaned data of nursing homes in the United States to build a database.
- Developed a web application that uses Deep Learning to suggest suitable nursing homes for elders.
- Keywords: Data Analysis, Data Mining, Data Cleaning, Machine Learning, Website Development.

#### LEADERSHIP ACTIVITY

#### **Purdue Undergraduate Chinese Association**

West Lafayette, IN

Leader, Media & Technology Department

Aug. 2018 - Present

- Developed the WeChat Mini Program, Organization Website, and Meeting Check-in App.
- Maintain the public WeChat, Weibo, and other social media accounts.

## **SKILLS**

Programming Languages: Java, C, Python, HTML, CSS, JavaScript, SQL

Framework and Tools: Django, Jekyll, Bootstrap, PySpark, MXNet, PyTorch, Pandas, Git, Linux

**Relevant Courses**: Operating Systems, Computer Networks, Information Systems, Relational Database Systems, Data Mining And Machine Learning, Artificial Intelligence, Analysis Of Algorithms, Object-Oriented Programming, Programming In C