DONGHAO CAO

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EDUCATION BACKGROUND

Beijing University of Chemical Technology (BUCT)   *Beijing, China*
B.Eng. in Mechanical Design, Manufacturing and Automation   *2022.09~2026.07(Expected)*
- ❖ **GPA**: 90.06/100 | **Ranking**: 4/81
- ❖ **Scholarships**: **National Scholarship** (Top 0.8%), BUCT 1st Scholarship,
- ❖ New Oriental Future Aboard 2nd Scholarship
- ❖ **Certification:** Industrial Internet platform development engineer
- ❖ **Software Copyright**: *2D Detection System V1.0 for Target Object Size Based on YOLOV5*, **_Donghao Cao_**, Jiawei Xia, Ziteng Xu, Xingpeng Bao (Registration No.: 2024SR0966412)

University of Oxford(Summer School of Regent's Park College)   *2024.07~2024.08*
- ❖ Completed a Summer School in Maths, Physics, Computer Science, and Engineering.
- ❖ Attended seminars on *Negative Emission New Energy Vehicles for Pollution Control* and *Analysis of Building Structures' Stability Using Two-Dimensional and Three-Dimensional Thermal Maps*.
- ❖ Won the 3rd Prize for *Best MicroFilm* in Movie Workshop.
- ❖ Get outstanding A+ grades in the summer school.

PUBLICATION

• (Submitted) Donghao Cao, et al. "The Position Visualization Modeling of Mechanical Product Assembly Line Based on Equidistant Helix" Proceedings of the **IEEE Xplore,** International Conference on Artificial Intelligence, Virtual Reality and Visualization (AIVRV 2025)

PROJECT EXPERIENCES

- ❖ **Project I: Optimize the DSMC-IS Smith Predictor based on bio-heuristic algorithms**

Supervisor: Researcher Ze Wang, Institute of Mechatronic Engineering, Tsinghua University

- ❖ **Project II: Robotics Arm Research**

Supervisor: Associate Professor ,University of Oxford

ACADEMIC AWARDS

- ❖ China Undergraduate Mathematical Contest in Modelling (CUMCM) - **Beijing Municipal 1st Prize**
- ❖ China International College Student Innovation Competition - **Beijing Municipal 3rd Prize**
- ❖ China Engineering Practice and Innovation Ability Competition - **Beijing Municipal 2nd place**
- ❖ BUCT Sprout Cup - Physical Production Channel - **University 1st place**
- ❖ United States Interdisciplinary Modeling Competition - **Honorable Mention**
- ❖ The 15th National Blue Bridge Cup - Python Group A (985 & 211 group) - **Beijing Municipal 2nd Prize**
- ❖ RAICOM Four-legged Collaborative Undergraduate Group - **Beijing Provincial 3rd Prize**
- ❖ Physics Experiment Competition of National - **University 1st Prize**

OTHER INFORMATION

Internship: Luoyang Petrochemical Engineering Construction Group Co., Ltd
Research & Development Intern   *2024.01~2024.02*
Skills: Python, MATLAB, AutoCAD, Autodesk Inventor, Computer Vision, Deep Learning, ROS, Arduino, SolidWorks