

# Yiying Dong

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## PERSONAL

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Gender: female      Age:24      Nationality: Chinese      Github: <https://yiyingdong.github.io>

## EDUCATION

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**Chongqing University of Posts and Telecommunications (CQUPT)**      Sep. 2018 - Jun. 2022

*B.S(Hons) in Software Engineering* (GPA: **3.65**/4.0, Score: **88**/100, Rank: **2**/139, IELTS: 7.0)

**University of California, Santa Barbara (UCSB), USA**      Jul. 2021 - Aug. 2021

*Summer school (Building the Blockchain world: Technology, Society and Innovation)*

**Nanyang Technological University (NTU), Singapore**      Jan. 2021 - Mar. 2021

*Artificial Intelligence Internship Programme (NTU business AI laboratory under Dr. Teoh TeikToe)*

## WORK EXPERIENCE

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**Eastern Institute of Technology, Ningbo**      Mar. 2024 - Aug. 2024

*Research Assistant*

- Conducted research on multimodal models and their applications in vertical domains, exploring their potential in information extraction and video generation under the guidance of [Professor. Guodong Guo](#).
- Investigated multimodal data fusion techniques, contributing to advancements in the field.
- Filed a patent application related to the research findings.

**Shenzhen Readline Biotech Co., Ltd.**

Apr. 2023 - Feb. 2024

*Research Assistant*

- Engaged in pioneering research at the intersection of signal processing and machine learning under the guidance of [Associate Professor Jian Liu](#) at the University of Birmingham.
- Enhanced the performance of artificial intelligence-assisted enzyme design models through advanced NLP techniques, contributing to interdisciplinary research.
- Developed an innovative predictive model for enzyme kinetics parameters, showcasing a commitment to pushing scientific boundaries.
- Filed two patents related to language model's downstream tasks.

## RESEARCH & PROJECT EXPERIENCE

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### Super Resolution Reconstruction

*Chongqing University of Posts and Telecommunications*

Mar. 2022 - Jun. 2022

- Studied single-image super-resolution reconstruction with [Prof. Xinbo Gao](#) and [Dr. Jiaxu Leng](#).
- Studied binary networks in super-resolution reconstruction.

### Design and Implementation of Image Colorization Based on Deep Learning

*Chongqing University of Posts and Telecommunications*

Jan. 2022 - May. 2022

- Collected data from ImageNet, VOC2007 and VOC2012.
- Proposed two machine learning based methods (an instance-aware image-colouring network and a semantic information-based generative adversarial network) for image colorization and compared with two classical algorithms.
- Obtained the **outstanding undergraduate thesis award**.

**Anomaly detection system for tracking missing children**

CHINA HI-TECH GROUP CO., LTD.

Jul. 2021 - Sep. 2021

- Designed an early warning system for tracking missing young children.
- Proposed a machine learning based algorithm for detecting children's abnormal behaviors.
- Launched the system to assist local police department in real cases.

### **Machine learning based business risk management**

Business AI laboratory at Nanyang Technological University

Jan. 2021 - Mar. 2021

- Received intensive training on machine learning models and data analysis techniques.
- Implemented several state-of-the-art machine learning algorithms for risk management and investigated the impact of parameter selection.
- Presented the project with **distinction** grade.

### **Facial expression recognition**

Chongqing University of Posts and Telecommunications

Nov. 2020 - Mar. 2021

- Collected data from NIR KMU-FED dataset and students in the university.
- Proposed several machine learning based methods for expression recognition.

### **Practical driver monitor system (DMS) for logistics and supply chain management**

Chongqing University of Posts and Telecommunications

Oct. 2020 - Mar. 2021

- Developed standard operating procedure (SOP) for pre-processing the data of logistics vehicles.
- Proposed several machine learning based methods for driver's identification, fatigue monitoring.
- Involved in front-end design for the warning system of abnormal driving.

## **GRANTED PATENTS & COPYRIGHTS**

- A smart yoga motion guidance system based on 3D reconstruction (CN112422946B)
- Vehicle Electronic License Plate Information Management System (Software Copyright Registration Number: 5950072)
- Centralized Charging Management Platform for Electronic Vehicle License Plates (Software Copyright Registration Number: 7509836)

## **SELECTED HONORS & AWARDS**

- China National Scholarship (**0.2%**), 2021
- 1<sup>st</sup> prize of the RoboWork, 2021
- 1<sup>st</sup> prize scholarship and merit student of Chongqing University of Posts and Telecommunications (1%), 2020
- 3<sup>rd</sup> prize of the "Huawei Cloud" Software Innovation Competition, 2020
- 2<sup>nd</sup> prize of the "Huawei Cup" IoT Innovation Competition of CQUPT, 2020
- 3<sup>rd</sup> prize of the "National College Students Competition for Internet of Things Technology and Application", 2020

## **PROFESSIONAL SKILLS**

Programming language: Python, C, C++, Java, JavaScript, R, LaTeX

Machine learning library: PyTorch, TensorFlow, Caffe, Keras, Open CV

## **ACTIVITIES & INTERESTS**

Activities: teaching assistant, laboratory supervisor, academic conference coordinator, student union

Interests: Marathon, travelling, photography, video editing