# **Binglun Wang**

School of Computer Science, University of Birmingham Edgbaston, Birmingham B15 2TT

bxw135@student.bham.ac.uk

+44 7724807306 (mobile)

#### **EDUCATION**

#### > University of Birmingham, UK

09/2021-09/2022

- Master of Science in Artificial Intelligence and Machine Learning
- Grades: 80%
- Expected Degree Award: Distinction

### > Northwest University, China

09/2017-07/2021

- Bachelor of Engineering in Electronic Information Science and Technology (Sino-foreign Cooperation in Running Schools)
- Grades: 79% in First three years, first degree in last year of University of Essex

### > University of Essex, UK

11/2017-06/2021

2022

2021

- Bachelor of Science in Electronic System Engineering
- Honours Class II (Division I)

#### **RESEARCH INTERESTS**

> Computer Vision, Deep Learning

### **PROGRAMMING CONTESTS**

	Fifth Place & Gold Medalist, Provincial Collegiate Programming Contest of China [Link]	2021
$\triangleright$	Silver Medalist, ACM-International Collegiate Programming Contest (ICPC) Asia Regional C	ontest
	(Yinchuan Site) [Link]	2020
$\triangleright$	Silver Medalist, National Collegiate Programming Contest of China (Mianyang site) [Link]	2020
$\triangleright$	Silver Medalist, ACM-ICPC Asia-East Continent Final [Link]	2019
$\triangleright$	Silver Medalist, ACM-ICPC Asia Regional Contest (Yinchuan Site) [Link]	2019
$\triangleright$	Bronze Medalist, ACM-ICPC Asia Regional Contest (Nanjing Site) [Link]	2019
$\triangleright$	Bronze Medalist, National Collegiate Programming Contest of China (Ha'erbin site) [Link]	2019

#### RESEARCH EXPERIENCE

- ➤ Deep learning-based 3D Human Pose Estimation (HPE) from Images/Videos, module project, University of Birmingham [Link]
  - Reviewed the current topic in AI & Machine Learning

# Semantic Segmentation of Cardiac Magnetic Resonance (CMR) Images using Deep Learning, module project, University of Birmingham <a href="Link">[Link]</a>

• Implemented segmentation task and improved the performance of 4NNs (UNet, DeepLab, SegNet, FCN) in small dataset (training dataset: 100 grayscale intensity images at 96 × 96 resolution)

• Results: The best test dice score achieved 0.891 (bagging of UNet3+ and UNet)

### > Image Classification in Deep learning, Degree Project, University of Essex [Link] 2020-2021

- Investigated and summarised several significant modern convolutional neural networks: LeNet, AlexNet, VGGNet, GoogLeNet
- Analysed the effectiveness of optimisers, data augmentation, dropout layer, and batch normalisation with extensive experiments
- Created a GUI system to visually compare results from different CNNs and classify photos in real time with trained models
- Results: the top1 val. errors (%) in CIFAR10 are 29.39, 16.3, 15.93 and 9.87 respectively (LeNet, AlexNet, VGGNet, GoogLeNet)

#### EXTRACURRICULAR EXPERIENCES

# Lecturer, Intelligent Processing for Multimedia Information Laboratory (IPMI), Northwest University 07/2021-08/2021

- A programme to improve new lab members' algorithm and coding ability
- Taught Game theory, number theory

### **Lecturer, Xiaozhi Programming Education Institution**

04/2020-10/2021

- A long-term programme training programming contest participants in High School Affiliated to Renmin University
- Offered tutorials of ICPC exercises and camps of OI in recent years

#### Lecturer, Jisuanke Informatics Education Institution

12/2019-09/2020

- A long-term programme training high school programming contest participants computer science
- Taught algorithms in OI and basic C/C++ programming

### > Student Coach of Algorithm Society, Northwest University

09/2019-07/2021

- Arranged ICPC programming training for the society
- Offered ICPC programming tutorial for the society members

### ➤ Video Blogger, <u>Bilibili</u> (a Chinese video sharing website) & <u>YouTube</u>

2018-now

2018

- Share tutorial videos of algorithm problems and algorithm exercises
- 180+ videos & 1800+ fans

### SCHOLARSHIPS & AWARDS

University

Rank 29th, Pawpularity Contest, Kaggle	2022
First-class scholarship, Northwest University	2019
Excellent Minister of the Student Union, Northwest University	2019
Second-class scholarship, Northwest University	2018
National prize of "Thousands of Universities and Thousands of Projects", Voluntary W	ork in
Rural Education, Northwest University	2018
School-level Third Prize, China College Students' 'Internet+' Innovation and	
Entrepreneurship Competition	2018
School-level First Prize, China College Students' Entrepreneurship Competition, North	west

E-mail: ping.su.19@ucl.ac.uk

Tel: 44-07529930295 / 86-13261616955

#### **EDUCATIONAL BACKGROUND**

### University of Birmingham - School of Education, UK

09/2021-09/2025

- Major: Philosophy of Education
- Degree: Doctor of Philosophy
- Thesis: Children's Political and Ethical Education in the Pandemic and Post-Pandemic Era (Supervisors: Prof Michael Hand, Dr Laura D'Olimpio)
- Funded by University of Birmingham and China Scholarship Council

#### University College London - Institute of Education, UK

09/2019-12/2020

- Major: Philosophy of Education
- Degree: Master of Arts (with Distinction)
- Dissertation: How Picturebooks Can Be Used in Philosophy for Children (P4C): A Response to the COVID-19 Pandemic (Supervisor: Dr. Adrian Skilbeck)

### Beijing Normal University (BNU), China

09/2015-06/2019

- Major: Chinese Language and Literature
- Degree: Bachelor of ArtsGPA: 3.70/4.0 (90.03/100)
- Rank: 11/174
- Dissertation: The Concept of Gender Identity in Picturebooks Adapted from the Story of Mulan
- Won the honour of Excellent Dissertation

### University of Warsaw and Jagiellonian University, Poland (Summer School)

07/2018

Grade A

### RESEARCH EXPERIENCES

### Philosophy of Education Society of Great Britain | Postgraduate Conference

09/2020

- Attended and presented the paper: Do Parents Have Freedom to Educate Their Children? Discuss the theory of Meira Levinson with the Wisconsin V. Yoder case
- The paper will be published in Conference Papers Collection

### The Third Educational Science Research in the "Thirteenth Five-Year Plan" of Kunming City |

### **Project Member**

04/2018-12/2020

- Theme: A Research on the Application of the Teaching Method Problem-Solving-Process-Explaining in Chinese Reading Teaching in Secondary School
- Analyse the teaching strategy and its effect; Refer to the literature, manage investigation statistics and analyse experimental results; Participate in the writing of the thesis

### **Key (Key grant) Project of Chinese Ministry of Education | Project Member**

11/2018-12/2018

- Theme: Comparative Literature and Theory of world Literature in the Era of Globalization
- Proofread the monograph World Literature and Its Place in General Culture in English

#### College Student Research and Career-creation Program of Beijing City | Project Leader

05/2017-05/2018

- Theme: The Study of the Spread of Chinese Traditional Drama in the English-speaking World and its Enlightenment on the "Going Out" Strategy of Chinese Traditional Culture
- Arranged the overall research work; Responsible for conducting surveys and in-depth interviews with relevant activities of Chinese traditional dramas in Confucius Institutes in English-speaking countries and designing courses; Wrote the final report

• Rated as Excellent School-Level Research Project

# College Student Research and Career-creation Program of Beijing Normal University | Project Leader O5/2016-05/20

Leader 05/2016-05/2017

- Theme: The Communication Study of "Peony Pavilion" in the English-speaking World—Based on Its Translation, Research and Influence
- Arranged the overall research work; Consulted and collated the English literature and translation together with the team members; Wrote survey report and paper

#### **INTERNSHIP**

- Experimental Middle School Attached to Yunnan Normal University | Teaching assistant 10/2018
  - Assisted Chinese teacher of teaching, reviewed homework, tutored students, and manage class affairs
- National Survey Research Centre (NSRC) | On-line Interviewer

10/2017-1/2018

- Responsible for online interviews with students participating in the fourth round of China Education Panel Survey (CEPS); Issued questionnaires to understand the full range of education status of students
- Won the honour of Excellent Intern

#### **EXTRACURRICULAR EXPERIENCES**

World Association of Lesson Studies International Conference | Volunteer

11/2018

- Wrote and translated conference materials; accompanied with and translated for foreign academics
- > Summer Social Practice | Participant

07/2017-08/2017

- Sought for information and wrote the proposal; Conducted in-depth investigations, participated in interview and photography work; Completed the survey report as the first author
- Won the honour of Excellent Individual in 2017 Summer Social Practice of BNU and our team won the honour of Excellent Practice Team
- **▶** White Pigeon Volunteers Association | Publicity Centre | Commentator

10/2015-10/2018

- Responsible for regular voluntary guidance related propaganda work in the exhibition hall of "Song Qingling's Former Residence"
- Won the title of Excellent Volunteer
- Youth Classic Guide Volunteer Service | Volunteer

05/2017-03/2018

- Guided reading for primary school students in grades three to four
- Won the title of Excellent Guide

#### **AWARDS & HONOURS**

First-class Beijing Normal University Scholarship for the academic year 2017-2018	09/2018
First-class Fellowship for the spring semester of 2017-2018, BNU	09/2018
Second Prize in the "BNU Cup" Extracurricular Academic Science and Technology Works Competition	on 07/2018
First-class Fellowship for the fall semester of 2017-2018, BNU	03/2018
Second-class Beijing Normal University Scholarship for the academic year 2016-2017	09/2017
Second-class Fellowship for the spring semester of 2016-2017, BNU	09/2017
Third Prize in the "Masterpieces Review Cup" National College Student Literature Competition	06/2017
First-class Fellowship for the fall semester of 2016-2017, BNU	03/2017
Second-class Beijing Normal University Scholarship for the academic year 2015-2016	09/2016
First-class Fellowship for the spring semester of 2015-2016, BNU	09/2016
Third-class Fellowship for the fall semester of 2015-2016, BNU	03/2016

#### **CERTIFICATION**

> The People's Republic of China Teacher's Qualification Certificate (Subject: Chinese language and literature)