Jiaxin Wang

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EDUCATION:

Carnegie Mellon University

Pittsburgh, PA Fall.2019-May.2021

Master of Science in Automated Science

Department of Computational biology, School of Computer Science Couse: Machine Learning, Automation of Scientific Research,

Biological Modeling and Simulation, Computational Genomics

Overall QPA: 3.20 Second semester QPA: 3.67

Zhejiang Normal University BS in Software Engineering

Jinhua, China

Fall.2014-June.2018

College of Mathematics and Information Engineering

Couse: Algorithms and Data Structures, Advanced Programming, Database Application, Operating System, Computer Network

Overall GPA: 3.76 Average score: 89 ranking 1/40

University of Wollongong

Wollongong, Australia

CSC funded excellent undergraduate program

CSC funded excenent undergraduate program

July.2017-Jan.2018

School of Computer Science

Couse: Computer Vision, Big Data Analysis

RESEARCH INTEREST

Artificial Intelligence, Computer Vision, Machine Learning, etc.

RECORDS OF STANDARD TESTS

IELTS 7 (Listening 6.5, Reading 8, Writing 6.5, Speaking 6.0) Sept.2017

GRE 322 (Q:168,V:154,W:3.0)

Oct.2018

RESEARCH EXPERIENCE

Graduate research:

Carnegie Mellon University

Pittsburgh, PA

Center for Neural Basis of Cognition(CNBC)

Research Title: EEG analysis on Musicality

Spring 2020-present

• Use feature extraction methods such as PCA to find biomarkers of Musicality in EEG data

Undergraduate research:

1. Join the group in Zhejiang Normal University

Jinhua, China

School project: Medical image ROI extraction Sept.2014-Nov.2015

- Participated a project that uses brain magnetic image resonance to extract medical image
- Implemented an image segmentation algorithm in MATLAB which shows Active Contour Model has better performance

School project: Facial expression recognition

Oct.2015-Mar.2016

• Worked on a project called image recognition based on facial expression, performed the face detection and eye localization.

Provincial Issue: Implementation of plant image searching engine based on Android platform

Oct.2016-June.2018

- Served as Principle Investigator sponsored by the Zhejiang Students Innovation Activity Plan
- Trained five classifications by using Tensorflow framework and developed an Android app called Plantpano

2. Join the group in Zhejiang University

Hangzhou, China

National Issue: Archeological Software Development

Sept.2016-July.2017

- Archeological multi-source database based on web GIS
- Visualization of multi-source data and implement
- Software registration (Second Author, 2017SR162221)

National Issue: Wavelet Noise Remove

Jan.2017-Sept.2018

- Strip noise removal for airborne radar data by using wavelet and 2D FFT filtering
- My job is the code implement
- Finished a paper for submission (Third author)

3. Visiting student at University of Wollongong

Wollongong, Australia

Remote Photoplethysmography

Aug.2017-June.2018

- Implement and improve the platform of remote photoplethysmography
- Present an efficient non-contact heart rate measurement based on CIELab color space
- Publish a paper on BIBE2018 conference

PUBLICATIONS

Paper

- 1. **Jiaxin Wang**, Philip O. Ogunbona, Jianmin Han, Bangbing Wang, An efficient non-contact heart rate measurement based on CIELab color space.// IEEE: International Conference on Biological Information and Biomedical Engineering. Shanghai, China, 2018, pp. 1-4.
- 2. Bangbing Wang, Bo Sun, **Jiaxin Wang**, Jamin Greenbaum, Jingxue Guo, Laura Lindzey, Xiangbin Cui, Duncan A. Young, Donald D. Blankenship, Martin J. Siegert, Removal of 'strip noise' in airborne radio-echo sounding data using combined wavelet and 2D FFT filtering,(accepted)

Patent

1.Bangbing Wang, **Jiaxin Wang**, Gang Tian, Zhanjie Shi and Wenke Zhao, A electrical-resistivity-tomography method and explorating system based on random distributing

eletrodes. Patent number: 20181034821048.5, (PCT application)

2. Bangbing Wang, Bo,Sun, **Jiaxin Wang**, Gang Tian, ZHanjie Shi and Wenke Zhao, A recognition method for ice crystal fabric and distribution of ice flow field in ice sheet based on polarimetric radar. Patent number: 201811257205.2, (PCT application)

Software Registration

- 1.Plant recognition platform, PlantPano, 2017SR243553, April.2017
- 2. Visualization platform for archaeological geophysical data, 2017SR162221, Feb. 2017

Working EXPERIENCE

Arcsoft Inc. Hangzhou

Computer Vision Algorithm Engineer Intern

Sept. 2018-June.2019

• Work on pedestrian detection and tracking algorithm, researching on deep learning network and developing application for commercial usage.

OTHER EXPERIENCE

Teaching Assistant	Fall.2019
Computational Perception course, CMU	
Team leader of Mathematical Modeling Contest	Mar.2015-June.2018
Information Engineering Department, ZJNU	
Secretary of the Students Union	Oct.2014-June.2015
Zhejiang Normal University	
Tutor for Informatics Olympiad Contest	Oct.2015-June.2016

Jinhua, Zhejiang

Anniversary volunteers Oct.2017

Zhejiang Normal University

AWARDS

Excellent Graduate of Zhejiang Province	June 2018
Government Scholarship, Zhejiang Province	2015-2017
Honorable Mention in COMAP's Mathematical Contest in Modeling (MCM)	March.2016
Mathematical Contest in Modeling Third provincial-level	Sept.2016
2016 Certificate Authority Cup Internet challenge round Meritorious	April.2016
2015 Certificate Authority Cup MATHEMATICAL CONTEST Meritorious	Nov.2015

SKILLS

- Proficient programming skills and experience (C/C++, Python, Matlab/R, Java, etc)
- Experienced in data analysis and image processing
- Strong logical and analytical approach to problem solving
- Well in Linear Algebra, Discrete, and Mathematical analytical knowledge
- Knowing about biomedical related area