

# Wanzhao Yang

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## EDUCATIONAL BACKGROUND

|   |                   |
|---|-------------------|
| <b>Lehigh University</b>                              | 08/2018 – present |
| Ph.D. Student in Computer Science                     | GPA: 3.8/4.0      |
| <b>Wuhan University</b>                               | 09/2015 – 07/2018 |
| Master of Pattern Recognition and Intelligent Systems | GPA: 3.7/4.0      |
| <b>Wuhan University</b>                               | 09/2011 – 07/2015 |
| Bachelor of Computer Science and Technology           | GPA: 3.4/4.0      |

## PUBLICATION

**M&M: Deep Learning Aided Multi-Facet Mental Health Support Tool for College Students**  
*HealthDL'20: Proceedings of Deep Learning for Wellbeing Applications Leveraging Mobile Devices and Edge Computing*

**RNN-based Signal Classification for Hybrid Audio Data Compression**  
*Computing, 2019*

**An RNN-Based Speech-Music Discrimination Used for Hybrid Audio Coder**  
“Oral Presentation”, the 24<sup>th</sup> International Conference on Multimedia Modeling (MMM2018)

**A Sound Image Reproduction Model Based on Personalized Weight Vectors**  
the 19<sup>th</sup> Pacific-Rim Conference on Multimedia (PCM2018)

## PROFESSIONAL EXPERIENCE

|  |                   |
|--|-------------------|
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 03/2020 – 05/2020 |
| <b>Research Assistant, A Survey Paper of Neural Conversational Systems</b>                                 |                   |
| ➤ Surveyed on neural conversational systems including task-oriented system, Q&A system and chatbot         |                   |
| ➤ Analyzed the current challenges in neural conversational system and the future work                      |                   |
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 10/2019 – 03/2020 |
| <b>Research Assistant, Deep Learning Aided Multi-Facet Mental Health Support Tool for College Students</b> |                   |
| ➤ Developed an Android Application to help students with their mental health issues                        |                   |
| ➤ Proposed Hybrid-VHRED model to implement the chatbot in the Android Application                          |                   |
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 04/2019 – 10/2019 |
| <b>Research Assistant, VR games for Parents with ADHD Kids</b>   |                   |
| ➤ Developed four VR games based on C++ on the Unity platform   |                   |
| ➤ Worked with Education Department students to train parents about using VR devices                        |                   |
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 03/2019 – 04/2019 |
| <b>Research Assistant, Sequence to Sequence Model in Dialog System</b>                                     |                   |
| ➤ Replicated a seq2seq model to implement a chat-oriented dialog system                                    |                   |
| ➤ Researched other modified models for optimizing the dialog system  |                   |
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 11/2018 – 12/2018 |
| <b>Research Assistant, Twitter Trend Analyzer</b>  |                   |
| ➤ Extracted tweets from twitter and created a MongoDB database for them                                    |                   |
| ➤ Performed data-mining techniques to analyze the Twitter Trend  |                   |
| <b>P.C. Rossin College of Engineering &amp; Applied Science, Lehigh University</b>                         | 10/2018 – 11/2018 |
| <b>Research Assistant, Intrusion Detection in Cyber Physical System</b>                                    |                   |
| ➤ Replicated a deep-learning-based intrusion detection model in SCADA system                               |                   |

- Optimized the intrusion detection model to improve the performance

**School of Computer Science, Wuhan University**

04/2017 – 08/2017

***Speech/Music Discrimination Method Based on RNN Analysis***

- Designed an RNN model to classify speech and music signal
- Integrated the RNN model with AMR-WB+ codec and achieved better performance

**School of Computer Science, Wuhan University**

03/2016 – 07/2016

***Teaching Assistant of Java Programming***

- Taught students Java programming
- Corrected students' assignments, supervised the examinations, and graded the tests

**School of Computer Science, Wuhan University**

10/2015

***Weibo Web Spider***

- Developed a web scraping tool using Python
- Performed a statistics analysis with different searching keyword
- Drew the timeline of the keyword appearance

**School of Computer Science, Wuhan University**

09/2015

***Mobile Streaming System –Confucius Institute Project***

- Assisted in constructing the streaming system
- Participated in producing the national audio video coding standard
- Took charge of the integration of audio codec in the system and P10 parts of AVS

**School of Computer Science, Wuhan University**

08/2013 – 11/2013

***The Amazing Wuhan University***

- Built the 'The Amazing Wuhan University' website
- Constructed the content using PHP, Apache and MySQL
- Programming a backend to process the photo image and uploading

***SOCIAL AND EXTRACURRICULAR ACTIVITIES***

|  |             |                   |
|--|-------------|-------------------|
| Wuhan University Volunteer Association | Minister    | 09/2012 – 06/2014 |
| Public Service Advertising Shooting    | Participant | 06/2013           |
| YHD.com                                | Intern      | 07/2012 – 09/2012 |

***AWARDS & HONORS***

|   |         |
|---|---------|
| The Third Prize of National Graduate Mathematical Contest in Modeling | 07/2016 |
| Outstanding Graduate of Wuhan University                              | 07/2015 |
| Outstanding Cadre of Wuhan University                                 | 07/2014 |
| Excellent Member of Wuhan University Social Practice Association      | 07/2013 |
| National Scholarship  | 09/2012 |

***SKILLS & HOBBIES***

Computer Skills: C, C++, Python, MATLAB, C#, Linux, Java  
Hobbies: Basketball, Flute, Djembe/Dundun, Swimming, Diving

***STANDARDIZED TESTS***

|              |                         |                      |
|--------------|-------------------------|----------------------|
| GRE: 315+3.5 | V:145,Q:170,W:3.5       | Test Date:09/29/2017 |
| IELTS: 6.5   | R:7.0,L:7.0,S:5.5,W:6.5 | Test Date:12/09/2017 |