# Dang Xilin | Curriculum Vitae

(+86) 18826006457 • ☑ dangxilin@stu2019.jnu.edu.cn • ☐ Codeforces: IcecreamArtist
(♣) IcecreamArtist

### Education

Jinan University Sep 2019-Jun 2023

Bachelor, Computer Science and Technology (Full English Teaching)

English language proficiency: Full English Teaching, CET6(507)

GPA: 4.24(5.0) or 92.4(100) (1/26)

#### Courses

#### Year 1

Jinan University

o Advanced Mathematics (InfoScience) I, Problem Solving and Programming: 98

o Linear Algebra: 93, Discrete Mathematics I: 98

#### Year 2

Jinan University

o Discrete Mathematics II: 94, Data Structures: 93, Computer Organization: 99

o Java Programming: 95, Operating Systems: 99, Design and Analysis of Algorithms: 99

o Operating Systems: 99, Probability Statistics: 92, ACM Programming: 98

#### Year 3(Ongoing)

Jinan University

o Database Systems: 95, Computer Networks: 95

o Digital Image Processing: 96, Internet Security and E-commerce Protocols: 98

o Machine Learning: 92, Artificial Intelligence: Ongoing, Computer Vision: Ongoing

## Research Experience

Publication: A defense method based on attention mechanism against traffic sign adversarial samples Spring 2020

Jinan University

Spring 2020

o Information Fusion, 76, 55-65.

• SCI index TOP journal with an impact factor of 12.975

 In the paper, we propose a defense method based on the attention mechanism that can guide the neural netowork to focus on the key parts of the target object in the image while ignoring the disturbance to achieve the defense goal

• We also propose a spatial transformation model that can transform significant parts of the image into new space and redraw to generate new images

Research: on AI model interpretability and Quantification of model damage after adversarial attack (Ongoing)Spring 2022 Jinan University

- As the team leader, use this topic to apply for the 2022 China College Student Innovation and Entrepreneurship Training Program Project
- o Propose a way to explain model collapse using physics theories and visualization tools

## **Competition Experience**

Winter 2021: Silver Medal: 2021 China Collegiate Programming Contest(CCPC) for Girls

Winter 2020: Bronze Medal: The 45th ICPC Asia Regional Contest Jinan Site

Spring 2022: TOP 150: Code Jam to I/O for Women 2022

Winter 2021: First Prize: 2020 Team Programming Leader Contest

Winter 2021: Bronze Medal: 2021 China Collegiate Programming Contest - Guangdong Provincial Collegiate Programming

Contest

Winter 2021: Second Prize: The 12th Lanqiao Cup National Software and Information Technology Professionals Competition Guangdong Province

#### **Academic Awards**

Fall 2021: National Scholarship

Guangzhou

Fall 2021: Outstanding Student Honorary Title of Jinan University
Fall 2020: Jinan University Excellent Student Third Prize Scholarship

#### Skills

**Programming**: C/C++(Advanced), Python(Advanced), Java(Skillful), LATEX(Skillful), Matlab(Skillful)

Research Tools: Pytorch, TensorFlow, Github, Linux, Colaboratory

#### Research Interest

- o Artificial Intelligence
- Machine Learning
- o Natural Language Processing
- Computer Vision
- Reinforcement Learning
- o Theoretical computer science

Strong interest in algorithm design, mathematical analysis and application.

Interested in interdisciplinarity, and the interface between theory and practical application, such as cognitive neuroscience, psychology, semantics, aesthetics, graphics, economics

During my graduate period, my ambition is to create something interesting, deepen scientific research, contribute to academia, and publish top journal papers as the first author.

### **Presentations**

## Dissertation seminar keynote speaker

Spring 2022

Jinan University

o An online meeting in the scientific research group to analyze a paper on the visualization of AI models

## ICPC winter vacation training camp dynamic programming topic

Winter 2021

Jinan University

- o Algorithm lectures for newcomers of the school's ICPC training team
- o The content is linear DP, backpack DP, shape pressure DP, interval DP, tree DP, etc.

## ICPC winter vacation training camp number theory topic

Winter 2020

Jinan University

- o Algorithm lectures for newcomers of the school's ICPC training team
- o The content is the basis of number theory, such as exgcd, Euler function, Mobius, etc.

# **Leadership Activities**

- o In 2021, served as the vice president of the school ICPC Association
- o In 2020, served as the president of the school Philosophy Association