

# Xin Liang

Gmail | GitHub

## EDUCATION

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**Tong Ji University**  
*a Sophomore in Software Engineering*

**Shanghai, China**  
*Apr 2021 – Present*

**Tong Ji University**  
*a Freshman in Architecture and Urban Planning*

**Shanghai, China**  
*Apr 2020 – 2021*

## RESEARCH INTERESTS

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Currently my research interests lie in **Reinforcement Learning**. During my **undergraduate** research, I really enjoyed the focusing state of working on one thing and the sense of excitement when successfully working problems out. I think it is interest and challenging to design algorithmic models to solve real-world problems by utilizing knowledge on math and statistics. I would love to be able to **explore more knowledge** in various related fields.

## RESEARCH EXPERIENCE

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**Tongji University**  
NAMI Lab, Research Assistant Shanghai

Oct 2022 – Present

- A patent in preparation proposes an algorithm for **optimizing** the gradient problem in **DARTS**, and the corresponding paper was accepted for presentation at ICASSP 2023.
- Learning **Monte Carlo Trees**, using **pytorch**, python to optimize the Chinese chess code based on **AlphaZero**, adding **behavioural clones** and then doing reinforcement learning to train the strategy network.

**Tongji-MIT City Science Lab**  
Scientific Intern, DApp-smart contract Group Shanghai

Jan 2023 – Present

- Worked with **Solidity** to develop smart contract based on specific modules
- Research into **DApp development architecture**, using **Hardhat** etc. to interface smart contract with front-end and back-end interactions
- Deploy **ABDK Library** to solve the problem of solidity not supporting floating point operations

## TECHNICAL SKILLS

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**Languages** : C/C++, Python, Solidity, MATLAB, HTML, CSS  
**Machine Learning** : PyTorch, TensorFlow  
**Databases** : MySQL  
**Design and Modeling** : Adobe PS/AI/ID/PR/AE, Unity3D, AutoCAD, Rhino, SketchUp  
**Web3 and Blockchain** : Polygon(Solidity), Hardhat, Remix

## AWARDS

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- Second Prize of Asia Pacific Cup Mathematical Modeling –Feb 2023
- National Inspirational Scholarship –Sept 2021 – Jan 2022
- Third Prize of Shanghai National University Student Mathematical Modeling –Jan 2022
- Second Prize in The Mathematics Modeling Competition of Tongji University –May 2021
- “Internet + ” University Students Innovation and Entrepreneurship Competition Tongji School Bronze Award –Sept 2022
- National Inspirational Scholarship –Sept 2020 – Jan 2021