

# YuChen Ding

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"Be the change that you want to see in the world."

## Education

### XIDIAN University

JUNIOR UNDERGRADUATES IN INFORMATION SECURITY

- GPA : 3.8/4 , Score (Five Semesters) : 88.8
- Academic Ranking: 11/154
- CET4: 596 , CET6: 531

Xi'an, China

Sep. 2018 - Now

## Honors & Awards

2019-2020 **National Scholarship(3/303)**, Model Student of Academic Records, The 1st Prize Scholarship

Xi'an, China

2018-2019 **The 1st Prize Scholarship**, Model Student of Academic Records, Excellent League Member

Xi'an, China

2020-2021 **Meritorious Winner(twice)**, Interdisciplinary Contest In Modeling(ICM)

U.S.A

2020.11 **The 1st Price**, Mathematical Contest in Modeling

Xi'an, China

2020.10 **The Golden Price**, China College Students' 'Internet+' Innovation and Entrepreneurship Competition

Xi'an, China

2020.10 **The 1st Price(10/200+)**, Chang'an Cup Electronic Forensics Competition

Xi'an, China

## Research Experience

### Efficient Encrypted Spatiotemporal Data Tracking System Based on Block-DAG

Xi'an, China

TEAM LEADER

Feb. 2021 - June. 2021

- Built blockchain block-DAG architecture to record users' spatiotemporal transaction data, and implement SPECTRE protocol to resolve conflict transaction. Introducing time and space Bloom Filter to improve query efficiency. At Full nodes, BFV full homomorphism encryption is used for transactions, and the data is processed in the form of ciphertext to ensure the privacy and security of users.
- I am jointly responsible for the overall design of the project, including front-end, back-end, mobile client architecture, and the implementation of blockchain system based on Go

### Research Project: Anomaly Detection and Recovery of UAV Flight Data

Xi'an, China

TEAM MEMBER

May. 2020 - Now

- Based on subspace learning and SVD, the algorithm realizes efficient online recovery of flight data and effectively reduces the resource consumption caused by high-dimensional heterogeneous data. Through the change of subspace, the abnormal score is calculated to realize the efficient identification of abnormal sources and make the results more interpretable.
- It won the provincial gold medal for participating in 'Internet+' Innovation and Entrepreneurship Competition.

## Competition Experience

### Lightweight AI Traffic Filter

Xi'an, China

TEAM LEADER

Feb. 2021 - May. 2021

- After aggregating the original pcap packets, the system uses tshark for offline feature extraction and data processing. To learn the feature pattern of normal traffic and to use sklearn to generate a random forest multi classifier to filter white traffic.
- I am responsible for the implementation of flow aggregation algorithm code and writing project documents.

## Student Cadre's Work

XIDIAN **Vice-monitor**, we won the title of "Top Ten Model Classes" in 2019-2020 academic year.

2019 - Now

XIDIAN **Organization Member**, I once had face-to-face communication with school leaders

2018 - Now

## Summary

I am rigorous, hard-working, and have good self-learning ability. I am responsible for programming in every scientific research competition project as being good at engineering programming; I also have good aesthetic ability and document writing ability. In the school as a variety of positions, I has a strong ability to organize cooperation, hence I am suitable for participating in team work. I hope I can devote myself to research, and apply what I have learned to contribute to the construction of national network security and network power.