

TIAN ZIQI

Personal blog: <https://cyberstrand.github.io>

Email: 245231528@qq.com

Phone: (+86)130 · 3561 · 0707

ACADEMIC PERFORMANCE

Sichuan University

June 2021

B.S. in Computer Science & Engineering

Overall GPA: 3.78/4 Average Score: 89.8/100

EXPERIENCE

Yalixin Technology Co., Ltd.

September 2023 - January 2024

Web Developer

- Participate in full-stack development using Vue and Spring Boot, designing and developing an industrial-grade management system.
- Implemented strict input validation and SQL operation checks during development to mitigate XSS and SQL injection attacks, ensuring website security.
- This internship provided valuable SDE development experience, enabling me to address vulnerabilities and design defense mechanisms from a developer's perspective.

NUS SummerWorkshop

July 2023 - October 2023

Security Tool Developer

- Create CodeGuard, an advanced source code auditing tool designed to detect XSS vulnerabilities. Unlike conventional tools, CodeGuard operates at the source code level, enabling automatic white-box testing with an impressive accuracy of 98%.
- In this project, I focused on serializing source code into vectors through semantic analysis and designing the training process of RNN neural networks to understand potential vulnerabilities.
- Additionally, I introduced AST trees to trace vulnerability origins, facilitating precise identification of code segments responsible for security flaws in CodeGuard.
- The exceptional precision distinguishes CodeGuard from other software solutions, earning it the top position in the 2023 National University of Singapore Summer Program, within the DOTA group.

SEED Lab

June 2023 - July 2023

Security Developer

- Completed the Web Security Labs section of SEED Lab, gaining insights into fundamental attack techniques and defense methods such as SQL injection and XSS cross-site scripting attacks.
- Acquired knowledge about common attack methods and defense strategies, including understanding the vulnerability types outlined in OWASP Top 10.

'Internet+' Innovation and Entrepreneurship Competition

December 2022 - June 2023

AI Developer

- develop an art assessment system based on CNN, employing AI to automatically score artistic images.
- Throughout the development phase, I led Python web crawler development to circumvent website IP detection, enabling the collection of historical art exam works data.
- Additionally, I spearheaded the design of CNN network layers, optimizing the structure using the ResNet50 residual neural network.
- This experience honed my proficiency in Python script writing and AI application development using PyTorch.

INTEREST AREAS

- I am passionate about cybersecurity and aspire to become an information security engineer focusing on the integration field of artificial intelligence and cybersecurity. I have a solid foundation in database management, computer networks, and relevant expertise gained through software development internships in internet companies. I participated in developing AI-based source code auditing tools at the National University of Singapore. I believe that the comprehensive information security courses and diverse project plans in the NGNE program will greatly contribute to achieving my career goals.
- During my first two years of study, my research primarily focused on deep learning network algorithms. During this time, I self-studied Python and the major frameworks in deep learning, laying a solid foundation in mathematics and computation. As I delved deeper into the field of computer science, my interest in cybersecurity began to grow. I started to familiarize myself with basic attack techniques and engaged in hands-on exercises through SEED Lab.
- Later, during the Summer Workshop at the National University of Singapore, I collaborated with my team members to develop a PHP source code auditing tool based on RNN, leveraging my understanding of deep learning algorithms. This experience illuminated the significant potential of AI in the field of cybersecurity. I aspire to further explore the intersection of AI and cybersecurity in my future studies and projects.

FUTURE PLAN

I am preparing to apply for the Information Security (Infocomm Security) specialization within the Computer Science (CS) program at the National University of Singapore (NUS). My ultimate goal is to pursue a career as a security engineer in an internet company. During my time at NUS, I aim to undertake industrial-level security projects to further enhance my professional capabilities. By immersing myself in rigorous academic study and hands-on projects, I aspire to emerge as a skilled cybersecurity professional capable of addressing the evolving challenges of the digital landscape.

I am also keen on exploring the integration of AI and security. If there are suitable opportunities in research labs, I am willing to apply for a PhD program at NUS to further investigate this field.

AWARDS & ACHIEVEMENT

- Received Sichuan University Scholarship for two consecutive years in 2021 and 2023.
- Named the Outstanding Student of Sichuan University in 2021.
- Won the Provincial Project Award in the "Internet Plus" National College Students Innovation and Entrepreneurship Competition in 2021.
- Awarded First Prize of DOTA Group in the National University of Singapore Summer Workshop in 2023.
- Filed for a national invention patent with the project "Intelligent Evaluation Method for Sketch Works Based on Deep Learning" in 2023.
- Achieved the S Prize in the American Mathematical Contest in Modeling in 2023.

TECHNICAL STRENGTHS

Computer Languages	Python, Java, Go, Javascript, C++
FrameWorks & APIs	Vue, SpringBoot, Golang, Redis, Pytorch
Tools	Git, Postman, Tomcat, MySQL, BurpSuit, WireShark
Technical Proficiency	Computer Networking, Distributed Systems, Database Systems, Operating Systems