Yanlin Zhou

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EDUCATION

Nankai University Sep 2020 - Jun 2024

Information security Bachelor Cyberspace Security Academy Tianjin

- **GPA:**3.81/4
- **Related courses:** Introduction to Artificial Intelligence (96), Machine Learning and Application (100), Network Technology and Application (94), Computer Network (88), Big Data Computing and Application (89), etc
- **Honorary Awards:** Public Scholarship (2021-2022), Academic Excellence Scholarship (2020-2021)
- **English:** CET-6 (527), IELTS (6)

RESEARCH EXPERIENCE

Enclave storage engine for utility databases Nov 2021 - Present

Joint Laboratory for Data Security

- Under the guidance of my supervisor, I have extensively reviewed literature to gain a deep understanding of related concepts, including searchable encryption, SGX, and dense data computation.
- With the guidance of my teacher, I was able to successfully replicate the B+tree storage structure outlined in the paper. Additionally, I simulated the buffer management and disk data storage management interfaces of the storage engine.
- I configured the OpenGauss database in the Ubuntu environment and integrated the OPE (order preserving encryption algorithm) and SSE (searchable symmetric encryption algorithm) into the source code of OpenGauss.
- I have previously gained knowledge and experience in the implementation of UDFs in databases. I have also successfully incorporated enclage into UDFs, creating an external interface.

Humanoid two-wheeled legged robot Sep 2022 - Present

Institute of Robotics and Information Automation

- I have received training on ROS1 and ROS2 (Robot Operating System) from Teacher Gu Yueju, and have gained hands-on experience by performing practical operations on both simulated environments and real robots.
- I actively took part in assembling the robot's legs, motor, and skeleton, and also modeled the necessary components for the robot. To bring the design to life, I utilized a 3D printer to produce the physical entity.
- I successfully established communication between the Bluetooth module on my mobile phone and the robot, allowing for more efficient robot movement control by replacing the original handle operation. My main responsibilities included network communication, protocol design, and interpreter writing.

COMPETITION

National Cryptographic Technology Competition (Captain) Aug 2022 - Dec 2022

- **Project Description:** I led a team in implementing a frequency hiding and sequential encryption scheme for lightweight client storage. My primary responsibility was to write the code for the encryption function, which included adding, deleting, modifying, and querying data. Finally, I tested the code in a virtual machine environment to ensure its effectiveness.
- **Team Responsibilities:** I was responsible for brainstorming and proposing innovative ideas, recruiting team members, creating a detailed project plan, and writing a comprehensive design report for the project.

Tianjin University Student Information Security Network Attack and Defense Competition (Captain) Sep 2022 - Nov 2022

- My primary responsibilities were focused on web attack and defense, as well as miscellaneous tasks. In the final competition, I successfully scored two questions, which contributed to our team's overall success in winning the third prize.

PROFESSIONAL EXPERIENCE

Shenzhen Tencent Computer System Co., Ltd Jul 2022 - Sep 2022

Operations intern Beijing

- My main responsibilities included optimizing front-end pages and processing and categorizing data obtained from the backend.
- I possess extensive experience in creating pertinent documentation and conducting information retrieval and data organization.

Beijing Zhongruan International Information Technology Co., Ltd Jan 2022 - Mar 2022

Development intern Beijing

- I was involved in a project focused on license plate occlusion detection and license plate recognition system, where I served as the development manager. My primary responsibilities included overseeing the project's implementation and optimizing the model to ensure its efficacy.

PERSONAL ABILITY

- **Mathematics:** Since high school, I have actively participated in numerous math competitions and achieved several awards. In addition, I have consistently excelled in courses related to mathematics throughout my university studies, often earning full or near-perfect marks.
- **Code:** I possess advanced proficiency in various programming languages, including C++ and Python. Through my coursework, such as Compilers, Techniques, and Tools and operating systems, I have honed my ability to develop high-quality programming projects.
- **Algorithm:** Through internships and several courses focused on intelligent technology, I have acquired extensive proficiency in a wide range of artificial intelligence algorithms.