

# Yifan Ni

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## EDUCATION

### New York University - Tandon School of Engineering

Brooklyn, NY

*Master of Science in Computer Engineering*

May 2024

Core Courses: Java(Java, Swing), Machine Learning(Jupyter, Scipy, numpy), Data Structure and Algorithm

### University of Delaware

Newark, DE

*Bachelor of Science in Computer Science*

May 2022

Core Courses: Data Structure(C++), Frontend(Javascript, npm), Secure Application Design(C, Python)

## PROFESSIONAL EXPERIENCE

### State Grid Corporation, Hefei, China | Cybersecurity Engineer Assistant

Jul 2021 – Aug 2021

- Offered security consultation and custom solutions to broad spectrum of clients, including business and education.
- Executed comprehensive penetration tests on clients' backend servers, using **Nmap** for server location identification and **Python** for developing penetration scripts such as privilege escalation.
- Provided expert advice for clients on advanced network security measures, such as customizing root IDs, captcha integration, and firewall setup, markedly improving defense against unauthorized network traffic.
- Supported the customer for **secure application design** and **code auditing**(Python, C, C++), implementing best practices in cybersecurity to ensure robust and resilient software solutions.

## KEY PROJECTS

### Multiuser based online Texas Hold'em Game | Java, Swing, Git

Mar 2023 – May 2023

- Architected and developed a client-server Texas Hold'em Poker game independently using Java Swing for the final project, showcasing strong technical acumen and full-stack ability in software development.
- Designed an engaging user interface in Swing, to ensure a seamless and interactive gaming experience.
- Implemented multithreading in backend in Java to efficiently handle multiple client connections and simultaneous game events, demonstrating proficiency in advanced programming concepts.
- Conducted thorough testing and debugging to ensure game reliability and performance, complemented by the creation of detailed documentation for project submission and future reference.

### Microbots, Bachelor Senior Group Design | Python, Jupyter, Git

Sep 2021 – Apr 2022

- Engaged in an Agile-based collaborative effort with the Mechanical Engineering department to develop an image processing program for tracking micron-sized microbots using microscope video/stream data.
- Utilized Trackpy within a Jupyter Notebook to implement accurate momentum detection of microbots.
- Participated in regular sprint meetings and progress demonstrations at the robotics lab, fostering a dynamic exchange of ideas and continual refinement of project objectives and methodologies.
- Showcased the agile development process through the successful demonstration of the microbot tracking system at various stages, highlighting its effectiveness at different resolutions.
- Compiled documentation for ongoing project use by the lab team and future students.

### Beatmaker, Frontend Group Design | HTML5, JavaScript, Bootstrap CSS, Git

Sep 2021 – Dec 2021

- Developed a website leveraging HTML5/Javascript, offering users to upload samples and create musical beats.
- Engineered an intuitive user interface using Bootstrap CSS, and programmed backend functionalities to ensure seamless audio processing and user interaction.
- Deployed the application on the course server, facilitating peer reviews.

## MISCELLANEOUS

- Languages: Python, Java, Javascript, Matlab, C/C++, Shell
- Dev Tools: VSCode, Eclipse, Git, Docker
- Skills: Agile Development, Object Oriented Programming