# Andre Bryan Hu

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## EDUCATION

**New York University, Tandon School of Engineering**<br>
*B.S. in Computer Science*

New York, NY<br>
*Expected May 2023*

- **Cumulative GPA:** 3.40/4.00 | **Honors:** Dean's List
- **Relevant Courses:** Algorithms, Computer Architecture, Data Structures, Object-Orientated Programming, Offensive Security, Operating Systems, Linear Algebra, Software Engineering

**Langley High School**<br>
*Advanced High School Diploma with Honors*

Mclean, VA<br>
*Aug 2016 – May 2020*

- **GPA:** 3.97/4.00 | **SAT:** 1520 (M:800 W:720) | **SAT II:** Math II – 800 | **AP Courses:** 13, National AP Scholar

## WORK EXPERIENCE

**Carve Systems**<br>
*Application Security Consultant (Intern)*

New York, NY<br>
*Jun 2022 – Present*

- Discussing with clients about their applications to accurately map attack surfaces and test multiple points of entry
- Generating technical reports on discovered findings and recommending proper remediations aligned with the OWASP
- Discovered XSS, weak file upload restrictions, and performed a subdomain takeover using Azure, Visual Studio, and .NET

**CTFd**<br>
*Software Engineer (Intern)*

New York, NY<br>
*Sep 2020 – Jun 2021*

- Developed and prepared writeups for security challenges in several topics using Python sockets, Flask, Docker, and Bootstrap
- Created a SSRF web challenge based on the CapitalOne breach using a simulated AWS EC2 instance with internal metadata
- Assisted in providing customer support during competitions and building upon feedback from participants

## PROJECTS

**GitHub Open-Source Scanning Tool**

- Utilized GitHub REST and GraphQL APIs to retrieve approximately 5.7 million existing organizations for static analyses
- Implemented a Pub/Sub service for code scanning organizations' repositories using Google Cloud and custom Semgrep rules
- Researched supply chain vulnerabilities through GitHub Actions and PR titles allowing RCE and leaking of secret tokens

**Explore NYU**

- Independently performed a light security assessment on nyu.edu using multiple reconnaissance techniques to find subdomains
- Researched and assessed on AEM applications by bypassing dispatcher restrictions and gaining access to sensitive configlets
- Discovered multiple findings including exposed .git repositories and public endpoints returning sensitive student information

**Cyber Security Awareness Week (CSAW) CTF**

- Monitored infrastructure and challenges using cronjobs to restart services and maintain performance for 1.5k+ competitors
- Hosted Discord bots on AWS to manage event support and filter messages for challenge answers or inappropriate language
- Reviewed through internal challenge code by applying security hardening in Dockerfiles and fixing CI/CD errors with JSONs

**DEFCON Biohacking Village**

- Collaborated with other volunteers in coordinating shifts and setting up infrastructure using AWS EC2 instances and S3 buckets
- Provided customer support during the event totaling 200+ participants among 150+ teams

## EXTRACURRICULARS

**Offensive Security, Incident Response, and Internet Security (OSIRIS) Lab**<br>
*CTF Team Captain, Researcher*

New York, NY<br>
*Sep 2020 – Present*

- Participates in frequent security competitions with an individual focus on web vulnerabilities and forensic analysis
- Present in weekly lab meetings about new topics and collaborate with others on research projects

**NYU Fencing Team**<br>
*Varsity Athlete*

New York, NY<br>
*Sep 2020 – May 2022*

- Competed in NCAA Division I tournaments nationwide and trained 4+ times a week during the season
- Currently ranked the top rating A19 by the United States Fencing Association

## TECHNICAL SKILLS

- **Programming Languages:** Python, C++, Golang, Java, JavaScript, HTML/CSS
- **Software Technologies:** Unix Shell, Git, Vim, AWS, Google Cloud, Docker, Flask, Bootstrap
- **Security Technologies:** Burp Suite, Semgrep, Binary Ninja, Ghidra, Wireshark