Andre Bryan Hu

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EDUCATION

New York University, Tandon School of Engineering   **New York, NY**
B.S. in Computer Science   Expected May 2023
- **Cumulative GPA:** 3.40/4.00 | **Honors:** Dean's List
- **Relevant Courses:** Algorithms, Computer Architecture, Data Structures, Object-Oriented Programming, Offensive Security, Operating Systems, Linear Algebra, Security and Human Behaviors, Software Engineering

Langley High School   **Mclean, VA**
Advanced High School Diploma with Honors   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   **New York, NY**
Application Security Consultant   Jun 2022 – Present
- Work with multiple clients in understanding their applications to map attack surfaces and test possible points of entry
- Generate 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   **New York, NY**
Software Engineer   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 integrated feedback from participants

PROJECTS

GitHub Open-Source Scanning Tool
- Utilized GitHub REST and GraphQL APIs to retrieve ~5.7 million existing organizations for static analyses and scanning
- Implemented a Pub/Sub cloud service for code scanning organizations' repositories using GCP and custom Semgrep rules
- Researched supply chain vulnerabilities through GitHub Actions and PR titles which allowed RCE and leaking of secret tokens

Explore NYU
- Performed a light security assessment on nyu.edu using multiple reconnaissance techniques to map an attack surface
- Researched and assessed 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 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   **New York, NY**
CTF Team Captain, Researcher   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   **New York, NY**
Varsity Athlete   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