

# Leon Chou

<http://bleepbloopsify.github.io>

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## EDUCATION

- **Stuyvesant High School** New York, NY  
GPA: 3.5 Sep. 2012 – May. 2016
- **NYU University** New York, NY  
Expected Bachelor of Science in Computer Science; GPA: 3.6 Sep. 2016 – May 2020

## EXPERIENCE

- **OSIRIS Lab** Brooklyn, NY  
Cybersecurity Research Lab Jan. 2017 – Present
- **Object Oriented Programming in C++** Brooklyn, NY  
Teaching Assistant for Professor Sterling Sep. 2017 – Present
- **CoHouse** Remote to CA  
Full-Stack web developer Jan. 2017 – Aug. 2017
  - **Django**: Backend framework in python, created actions and endpoints
  - **Google Scripts**: Frontend CRM to display onboarding status
- **Data Structures in Python3** Brooklyn, NY  
Teaching Assistant for Professor Iacono Jan. 2017 – May 2017
- **HULEDET** Manhattan, NY  
Full-Stack Web Development Intern May 2016 – Dec 2016
  - **PHP/WordPress**: Full PHP backend refactor, creating actual models to interact with the database to easily regenerate objects
  - **MySQL**: Refactor backend to work with PDO, to prevent against injection attacks with prepared statements

## PROJECTS

- **justcats** CTFD  
Plugin for CTFD to display categories as challenges Sep. 2017
- **AD-Tooling** OSIRIS Lab  
Full Internal tool to interface with other Attack/Defense tools during AD style CTFs Sep. 2017 – Present
  - **Flask**: Python3 Flask Middleware, allows any import of python tooling and modules to be written, uses global pip on the box to distribute access to webserver models for query at any time.
  - **SQLAlchemy/MySQL**: MariaDB backend, JSON fields allow for easy packet parsing and querying.
  - **JSX/React**: Webpack and yarn to package manage and transpile JSX, React to display the tools and provide simple front-end configuration.
- **notmycupofcoffee** OSIRIS Lab  
CTF challenge focused on deserializing Java objects Sep. 2017
  - **JSP**: Java Server Pages, exemplified why storing state in frontend is a bad idea, and why debug mode should be turned off.
  - **Maven**: Java's package manager, quite difficult to get to compile, but managed to pull the packages we needed and have the auto-solver in the same directory anyways.

## SKILLS

- **Tooling**:
  - **GDB**: Debugger for dynamic binary analysis
  - **IDAPro**: Hexrays analysis of binary programs for ease of code reading
  - **Binary Ninja**: Decompilation and visual representation of binary programs for ease of code reading
  - **Wireshark**: pulling packets, analysis of packets in attempt to match its functionality and surpass it
- **Languages**: Programming
  - **Python3.5/3.6/2.7**: Flask applications, command-line scripts, pwntools, everyday menial tasks, TCP sockets
  - **Node.JS 6-7**: Web apps, TCP implementations of new web protocols, single page apps with webpack and React
  - **Bash/Zsh**: Everyday terminal usage, menial QOL scripts, avoiding usage of UIs when dealing with filesystems
  - **LaTeX**: Resumes and writeups for CTF challenges
  - **C/C++**: TA and minor usage for writing challenges, Node Addons
  - **HTML/CSS/SCSS**: Templating, basic styling, inlined scss with webpack

## RELEVANT COURSEWORK

- **Binary Analysis** NYU  
Using dynamic and static algorithms to analyze binary programs. Sep. 2017 – Present
- **Data Structures and Algorithms in Python3** NYU  
Advanced structures and sorting/search algorithms Sep. 2016 – Dec. 2016
- **Object Oriented Programming in C++** NYU  
Basic coding principles and good programming practices Jan. 2017 – May. 2017