# Nicolas Barrios

nbarrios1337.github.io

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**OBJECTIVE:** To apply my object-oriented programming experiences for applications in distributed systems.

## EDUCATION

### UNIVERSITY AT BUFFALO
BS/MS in Computer Science
Expected 2022 | Buffalo, NY
School of Engineering & Applied Sciences
GPA: 3.78 / 4.0
Minor: Mathematics
Presidential Scholar

## LINKS

Github://**nbarrios1337**
LinkedIn://**nbarrios1337**
Twitter://**@nbarrios1337**
Keybase://**nbarrios**

## COURSEWORK

Intro. to Computer Science I & II
Discrete Structures
Data Structures
Systems Programming
Intro. to Human-Computer Interaction
Algorithms & Complexity
Computer Organization

## SKILLS

### PROGRAMMING
Proficient in:
C • C++ • Java • Python • Shell
Familiar with:
Android • Assembly • HTML • CSS • Javascript • LaTeX

## OPEN SOURCE WORK

### NVME-CLI
NVMe management command line interface.
Github://**linux-nvme/nvme-cli**
Contributed to the shell auto-completion features of the command line interface.

## EXPERIENCE

### TEACHING ASSISTANT | Systems Programming
Aug. 2019 – Present | Buffalo, NY
- Collaborating with professors and fellow teaching assistants to reinforce course materials.
- Hosted lab sessions where students developed course-relevant programs.

### OUTREACH AND TECHNOLOGY LEAD |
Artificial Intelligence Institute
Mar. 2019 – Present | Buffalo, NY
- Managing social media outlets (i.e. Twitter, LinkedIn, website) of the institute by publishing and maintaining content.
- Analysed data for an improved, AI-based, cross-publication reference tool for researchers.

### EVENT COORDINATOR |
School of Engineering & Applied Sciences
Oct. 2017 – May 2018 | Buffalo, NY
- Organized events for prospective SEAS freshmen coming into the university.
- Presented the university's engineering and scientific accomplishments in an incentivizing way.

## PROJECTS

### SENTINEL | Developer
Aug. 2019 - Present
- Developing an Android app to showcase a phone's sensors and their capabilities.
- Github://**nbarrios1337/Sentinel**

### DYNAMIC MEMORY ALLOCATOR | Developer
Apr. 2019 - May 2019 | Buffalo, NY
- Implemented a dynamic memory allocator suitable for replacing malloc() for heap memory in a Unix process.

### DIGITAL CODENAMES | Contributor
Jan. 2018 - May 2018 | Buffalo, NY
- Recreated the **Codenames** board game with our growing knowledge of Java.
- Developed event handling system using object-oriented project structures.
- Github://**nbarrios1337/Codenames_in_Java**

## RESEARCH

### EMERGING BIOMETRICS LAB
Jun. 2018 – Aug. 2018 | Buffalo, NY
- Worked with **Wenyao Xu**, Assistant Professor in Computer Science and Engineering, to create a ECG waveform classifier, a proposed tool which could continuous authenticate a user, providing better security than current authenication methods.