# Raiyan Reza
## Volunteer @ NYU Alumni Program | BSc in CS @ New York University

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https://srr408.github.io/ OR SCAN QR CODE

## EDUCATION

**New York University**, NYU Shanghai, Shanghai, China, Class of 2023
**Bachelor of Science, Computer Science,** CGPA: 3.3 / 4.0
*Relevant Coursework: Software Engineering, Functional Programming, Information Visualization, Data Structures, Basic Algorithms, Computer System Organizations.*

## PROJECTS

**Personal Website** (**HTML | CSS | JavaScript**)       Jan, 2024 - **Present**
*Deployed **a fully functional lightweight web page** with **modern UI/UX standards** that earned praise by the likes of a **PhD student from a top CS program, a software engineer at a reputable firm**, and **other qualified professionals**.*
- Identified an appropriate template for a professional portfolio page.
- Programmed substantial modifications to the template for effective communication of education, experiences, and skills.
- Resolved design flaws utilizing user feedback — changed download button to be more intuitive, devised a solution to host multiple formats of a file.

**Qalb+** (**Django**)       Aug, 2022 - Dec, 2022
*Collaborated with my four team members on all stages of **building a web application prototype** letting patients meet doctors online in the region of **United Arab Emirates**, a work that was within top percentile of all submissions.*
- Designed the class diagram and one of the sequence diagrams that guided the project.
- Built the optional feature letting prospective doctors upload their credentials as static files (diploma, license, etc) to the app database, thereby, going above and beyond what was required for the work.

**Context Free Parser for Chinese Grammar** (**Python | Haskell | LaTex**)       Aug, 2022 - Dec, 2022
*Collaborated with my teammate, Anh Nhat (Daisy) Huynh, and thesis advisor, Dr. Paul-André Melliès, on a theoretical work on parsing algorithms, **a very advance topic for undergraduate students**.*
- Authored most of the written reports and the literature review that were required by the reviewers.
- Proved completeness for the Earley Parser algorithm, a challenging proof.
- Verified that the toy Earley Parser coded by Huynh obtained the theoretical best-case run time of O(n) for certain inputs.

**A Sketch of A Pandemic** (**JavaScript | D3.js**)       Aug, 2020 - Dec,2020
*Created **an interactive webpage** that contextualized the spread of the pandemic in the USA in a global setting, a project that was within the top percentile of submitted works on **information visualization**.*
- Researched credible information sources on Our World In Data and Kaggle for the project.
- Coded up interactive and accurate views for displaying COVID cases and mortality for 228 countries in the form of treemap and bar charts that balance expressiveness with accuracy.
- Devised a solution to show the time evolution of the pandemic across the USA from Jan, 2020 to Dec, 2020 in the form of a choropleth map.

## TECHNICAL SKILLS

Languages: Python, C, C++, Haskell, JavaScript, SQL
Framework & Tools & Others: Django, D3.js, LaTex, Pandas, NumPy, Matplotlib, HTML, CSS

## ACTIVITIES

**English Language Partnership With Ukrainian Refugees**       Apr, 2024 – **Present**
*New York University Alumni Program*
Conducting conversation sessions with a Ukrainian refugee to help them develop their conversational skills in English as **part-time volunteer work**.

**Undecidability, Uncomputability, and Unpredictability Essay Contest**       Apr, 2020
*Foundational Questions Institute*
Co-authored a well rated for an essay competition on the topic of intersection **of Gödel's incompleteness theorems**, **the halting problem**, and **unpredictability in quantum mechanics** that primarily drew scientists, philosophers, PhD students and other such individuals.

## LANGUAGES

English, IELTS Overall Band Score of 8.0 | Farsi/Persian, Conversational | Bangla, Conversational | Mandarin, Limited