Ohaka, Bangladesh (00880) 1706 562505 srr408@nyu.edu in www.linkedin.com/in/raiyan-reza https://github.com/srr408

EXPERIENCE

Intern, IT Department, **UniMed UniHealth Group**, Dhaka, Bangladesh

Oct, 2024 - Present

- Developing an Inventory Management System for the IT department. (**Django**)
- Built a web scraper to automate data collection from the web, effectively reducing two to three days of manual data collection and entry to a few hours of work. (Python | Selenium | Beautiful Soup | Pandas | Lxml)

PROJECTS

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 received well.

- 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.

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

TECHNICAL SKILLS

Languages: Python, C, C++, Haskell, JavaScript, SQL

Framework & Tools & Others: Django, D3.js, LaTex, Pandas, NumPy, Matplotlib, HTML, CSS, Selenium, Beautiful Soup, Lxml

ACTIVITIES

English Language Partnership

Apr, 2024 - Jul, 2024

New York University Alumni Program

Organizing and holding conversation sessions with a Ukrainian affected by the ongoing war in their home country in order to improve their conversational skills in English.

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