Raavi Chowdhury

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Profile

Passionate about developing web technologies and software that provide revolutionary user experiences and a lasting positive impact on the communities that need them.

- Object-Oriented Programming (Java, C++)
- Thorough experience with Version Control Systems
- Scripting & Automation (Python, PHP) Web
- Strong Writing Ability (Technical & Creative)
- Development & Graphic Design (React, Django)
- Excels in Agile work environment

EDUCATION

B.S. Software Engineering, Rochester Institute of Technology | GPA: 3.37/4.0 | May 2023
Minor in Music & Technology

RELEVANT EXPERIENCE

Student Software Engineer   Jan. 2021 - Present
RIT Enterprise Web Applications | Rochester, NY
Developed a modern web experience for RIT's Division of Finance and Administration
- ❖ Corresponded directly with customers while analyzing outdated web pages to develop requirements for the new environment
- ❖ Created wireframes and sitemaps to design optimal user flows with business goals in mind
- ❖ Built clean, contemporary pages for customers using Drupal 9 with special attention to ADA compliance and accessibility requirements
- ❖ Composed 21 page documentation for RIT's Drupal environment with breakdowns of key functions for customer maintenance
- ❖ Released seven concurrently developed projects which resulted in both customer satisfaction and university-wide acclaim

Tools: PHP, Drupal 7/8/9, SQL, TWIG, HTML5, CSS3, Bootstrap

Software Engineer Intern   Jun. 2022 - Aug. 2022
University of California Santa Barbara | Santa Barbara, CA
Assisted a SecLab research project regarding the detection of fake news on Twitter based on tweet propagation patterns
- ❖ Developed Python scripts to balance datasets, detect and set retweet depths, and apply domain-based heuristics with Twitter API
- ❖ Prepared and ran Twitter datasets through machine learning models on PyTorch
- ❖ Recorded data and created documentation regarding datasets and scripts

Tools: Python (NumPy, PyTorch, Tweepy), Bash, Linux

Research Assistant   Jan. 2022 - May. 2022
Vulnerability History Project - RIT | Rochester, NY
Worked with Professor Andy Meneely to support the open source Vulnerability History Project at RIT.
- ❖ Developed and maintained Python scripts utilizing BeautifulSoup to scrape webpages to capture information about the latest CVEs
- ❖ Fixed bugs and maintained the web environment

Tools: Python, PostgreSQL, Ruby on Rails

SWEN/CS Tutor   Feb. 2020 - May 2020
CSTEP at RIT | Rochester, NY
Guided RIT's CSTEP students through computing courses and fostered a caring learning environment
- ❖ Strengthened students' understanding of Software Engineering and Computer Science topics involving C, Java, Ruby, and Python
- ❖ Coached students to better their methods of writing & debugging code to efficiently progress through coding projects and assignments
- ❖ Helped students prepare for exams and practicums, resulting in an upwards trend in received grades

Tools: Java, C, Ruby, Python

PROJECTS

Nightclub Capacity Tracker
Developed a full stack application for tracking head-counts across multiple nightclub locations
- ❖ Developed responsive, mobile-ready frontend in React
- ❖ Built REST API in Flask to interact with Python backend
- ❖ Designed relational model and wrote DDL to define schema in PostgreSQL

Tools: React, Python, Flask API, PostgreSQL

Page Discovery and Fuzzing Tool
Created an automated, customizable webpage discovery & fuzzing tool to discover vulnerabilities
- ❖ Designed fuzzing system to be highly configurable to fit a variety of vulnerability-seeking needs
- ❖ Utilized Python3's MechanicalSoup package to scrape pages for inputs and leaked data

Tools: Python, MechanicalSoup, Apache, MariaDB