

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.

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| • Object-Oriented Programming (Java, C++) | • Thorough experience with Version Control Systems |
| • Scripting & Automation (Python, PHP) | • Strong Writing Ability (Technical & Creative) |
| • Web 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

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| Student Software Engineer
RIT Enterprise Web Applications Rochester, NY
Developed a modern web experience for RIT's Division of Finance and Administration <ul style="list-style-type: none">❖ Corresponded directly with customers while analyzing outdated web pages to develop requirements for the new environment❖ Created wireframes and sitemaps to design optimal user flows with business goals in mind❖ Built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 | Jan. 2021 - Present |
| Software Engineer Intern
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 <ul style="list-style-type: none">❖ 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 | Jun. 2022 - Aug. 2022 |
| Research Assistant
Vulnerability History Project - RIT Rochester, NY
Worked with Professor Andy Meneely to support the open source Vulnerability History Project at RIT. <ul style="list-style-type: none">❖ 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 | Jan. 2022 - May. 2022 |
| SWEN/CS Tutor
CSTEP at RIT Rochester, NY
Guided RIT's CSTEP students through computing courses and fostered a caring learning environment <ul style="list-style-type: none">❖ 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 | Feb. 2020 - May 2020 |
- ## PROJECTS
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| Nightclub Capacity Tracker
Developed a full stack application for tracking head-counts across multiple nightclub locations <ul style="list-style-type: none">❖ 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 <ul style="list-style-type: none">❖ 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 |