zuizzms@bu.edu | 860-929-8245 | Personal Portfolio: https://github.com/zuizzms

EDUCATION

- Boston University (2021-2025)
 - o BA/MS in Computer Science, GPA: 3.67 (Dean's List)

WORK EXPERIENCE

- Software Engineer Intern for Triumph Engine Control Systems (In Progress: June 2023-Present)
 - Migrated software quality assurance/audit data from Synergy (Issue Tracking Software) to Jira using Perl (1000+ SQA documents that needed to be queried from Synergy and formatted using Adobe Acrobat Pro)
 - Developed Automated Criteria Evaluation tool for EMC110 ECU using Matlab (~70 test cases evaluated)
 - Analyzed unused code for Critical Design Review of T55-714C's engine control unit by generating map files for respective software builds (~9000 functions evaluated across both primary and reversionary channel)
 - Assisted in Honeywell SOI 2 preparation (assessed 50+ Software Problem Reports and 170+ Unit Development Folders containing module source code, design/code review forms, and traceability/revision difference forms
- Data Scientist and Investigative Journalist for The Grio (Spring 2023)
 - Created/evaluated a database of 3,285 exoneration cases in the U.S. and utilized NumPy to analyze patterns of warrant misconduct by police officials (identified 51 cases of warrant misconduct)
 - Presented findings at Demo Day event (150+ attendees), and published <u>article</u> in honor of Breonna Taylor
- CS Learning Ambassador at BU Spark! (2023-Present)
 - Organized BU's Civic Tech Hackathon (100+ participants), weekly tech talks (~25 attendees/week), and created a
 welcoming environment in the Spark! Space for 30+ students during shifts (10 hours/week)
 - Created 3 programming micro challenges for Baby Got Hack event (70+ participants)
 - Guided ~20 students in Bug Bash Event, teaching students effective strategies for debugging
- Research Intern at Center for Quantitative Medicine, UCONN Health, Farmington, CT (Summer 2020, Summer 2022)
 - Weekly presentations to 10+ lab members on the progress of identifying CD8T Cell Memory Drivers
 - Given two feedback vertex sets computed by NETISCE, conducted perturbations on ~15,000 subsets of size 4 to identify targets for experimental cell fate reprogramming
 - Successfully reprogrammed the unperturbed embryo to 6/7 tissue fates using the corresponding experimentally verified perturbations on FVS control nodes (See https://veraliconalab.org/software/)
- Resident Assistant at Boston University (2022-Present)
 - Support 42 undergraduate students in their transition to college life by identifying and addressing their needs according to the goals of community building, diversity, and inclusion
 - Participate in a duty rotation for ~600 students, and responded to emergencies during 24-hour shifts
 - Utilized crisis intervention and conflict mediation skills to facilitate students through 1-on-1 meetings
- BU Intramural Basketball Referee (2022-Present)

PERSONAL PROJECTS (see portfolio)

- The Eight Puzzle
 - Uses state space search to solve the Eight Puzzle and compares the efficiency of various state space search algorithms (involving different heuristic functions)
- Connect Four
 - A Connect Four game that can be played with a human player or AI player. The AI player analyzes ideal future
 moves to improve its strategy (its intelligence can be adjusted by the user).
- Sudoku Solver
 - Implements recursive backtracking to solve any valid unsolved Sudoku puzzle

SKILLS

- Technology Stack: Python, Java, C Programming Language, Perl, HTML, CSS, OCaml, UNIX, Git, AutoCad
- Languages: English, Urdu/Hindi (native proficiency), ASL (intermediate), Mandarin (intermediate)