Sohail Ali
Software Engineer

NYC   (917) 455-5679   soali3107@gmail.com   **PORTFOLIO**   **GITHUB**   **LINKEDIN**

TECHNICAL SKILLS
Python, React, Redux, Ruby, Ruby on Rails, Javascript, HTML, CSS, SQL, PostgreSQL, SQLite3, AWS, Java, Jupyter, Git, Heroku, Webpack

PROJECTS

FlexIt   (Rails, React, Redux, HTML5, CSS3)   live | github
Single-page clone of the Netflix web application that allows users to watch videos and add videos to their lists.
- Secured user login by using BCrypt and react-router components to keep track of session cookies, creating a system design that allows user login to persist across a session, and protect user-generated data.
- Hosted pictures and videos in the cloud using AWS integrated into the Rails Active Storage, providing easier asset management and allowing scalability when more videos or general media are incorporated into the application.
- Integrated Redux with HTML5 media web elements to create customized media playback for users and ensure play/pause status and video time is accessible throughout the application architecture and design.

Chess   (Javascript ES6, HTML5, CSS3)   live | github
Online 2-Player Chess game.
- Registered an *onclick* event listener which is triggered by selection of any piece or board space and incorporates custom-built chess logic that collects all potential moves, enabling an intuitive user interface (UI).
- Constructed hierarchy of piece classes to create custom movement logic with classic object-oriented programming patterns, leveraging inheritance to simplify and optimize codebase.
- Built a custom check/checkmate function to iterate through the appropriate pieces to test if playable moves result in the King piece being in check or checkmate.

EXPERIENCE

SAT Math Instructor
Angel Advantage Center   July 2018 - August 2018
- Developed homework, curriculum, and quizzes based on extensive research on SAT structure and content.
- Managed team of teaching assistants to follow grading guidelines.

Peer Mentor / Tutor   August 2015 - May 2018
Stony Brook University
- Rapidly developed fundamental skills needed to understand intimately the materials being taught.
- Coached undergraduates in various subjects including single- and multi-variable calculus, linear algebra, and physics.
- Elevated students' comprehension from as low as 20% to 80% within 24–48 hours of final exams.

Math Team   September 2011 - June 2015
- AIME Qualifier ('15): scored in the top 5% nationwide at the American Mathematics Competition (AMC), qualifying for the American Invitational Mathematics Examination.
- Special Junior Division NYCIML ('14): Third Place. New York City math competition among specialized high schools.
- New York Math League ('13,'14): honorable mention. Scored a perfect score on at least one contest in the years listed.

ACHIEVEMENTS
- MITx 6.00.1x: Introduction to Computer Science and Programming Using Python (2020)
- Stony Brook Presidential Scholarship (2015-2018)

EDUCATION

Full Stack Web Development - *App Academy*   *July 2019 - November 2019*
Intensive software development bootcamp with a focus in full stack, object oriented programming using Ruby on Rails and various JavaScript frameworks.

Bachelor of Science (BS) - *Stony Brook University*   *August 2015 - May 2019*
Applied Mathematics/Statistics and Information Systems Major
Courses: Data Science (Jupyter and Python), Introduction to Java, Logic, Foundations of Computer Science