Jesse Nicholas

Software Engineer

Projects

Jesse Nicholas

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<u>Trio Jam</u> // A strategic single-player word game for web and mobile

TECHNOLOGIES: Firebase, React, React Native, Javascript, CSS/HTML, Expo

- * Built web version with mobile-first design and touch support for user accessibility.
- * Mobile app has additional features such as achievements, high score tracking.
- * Implemented firebase analytics to monitor growth and expand/improve popular features.

Tetris Buddies // A collaborative multiplayer Tetris variant

TECHNOLOGIES: NodeJS, Express, Socket.io, Javascript, CSS/HTML, Handlebars

- * Implemented multiple game modes, as well as player settings (customizable usernames, sound toggle, etc.) to enhance user experience.
- * Flexible algorithm adjusts automatically to a team member quitting mid-game.

Shock and Draw // A head-to-head Pictionary-style drawing and guessing game

TECHNOLOGIES: NodeJS, Express, Socket.io, React, CSS/HTML

- * Designed and implemented seven unique "attacks" that target various aspects of gameplay
- * Implemented automatic transition between rounds, including round previews, score updates, and a final score report that includes attack statistics.

Q Maze Solver // A maze-solving AI using reinforcement learning

TECHNOLOGIES: Javascript, JQuery, Plotly, HTML/CSS, Python/Tensorflow

- * Designed and implemented maze-solving temporal difference learning model.
- * Created interface allowing users to design their own mazes.

Work Experience

Center for Democracy and Technology // Freelance Software Engineer

JUNE 2022 -PRESENT — NEW YORK, NY

Created a data-labeling platform similar to Amazon's Mechanical Turk. Structured database with scalability in mind to maximize performance and minimize backend costs. Used python to clean data and pre-process files.

Sullivan Cotter // Freelance Software Engineer

MAR 2022 - JUNE 2022 - NEW YORK, NY

Created a living wage calculator for companies to ensure employee welfare, factoring in local cost of living and adjusted for non-salary benefits provided. User-friendly interface supports both entering data manually and uploading from a spreadsheet.

Sesame Workshop // Writer

NOV 2019 - PRESENT — NEW YORK, NY

Wrote full episodes of *Mecha Builders*, which premiered in May, as well as for the recurring *Sesame Street* segment "Abby's Amazing Adventures."

Baboon Animation // Writer

FEB 2018 - JUNE 2021 — BROOKLYN, NY

Wrote full episodes for animated children's show *Taffy* (Boomerang), did comedy punch ups for dozens of animated shows and movies, managed interns and edited scripts.

Skills Backend Development: NodeJS, Express, Firebase, Python, SocketIO **Frontend Development:** Javascript, React, Bootstrap, CSS, HTML

Misc: Git, C++, React Native, Expo, TensorFlow, Keras

Education Boston College // Bachelor of Arts in Mathematics, Minor in Economics

MAY, 2018 — CHESTNUT HILL, MASSACHUSETTS