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Ritin Malhotra

Education

New York University

May 2024

- B.S. in Computer Science with a minor in Economics. GPA: 3.863 / 4.0
- Coursework: Agile Software Engineering and DevOps; Database Design; OS; Networks; Data Structures; Algorithms; Quantitative Data Analysis; Applied Machine Learning; Applied Data Science; UX Design

Work Experience

UNIX Lab Peer Tutor

New York University Abu Dhabi

Sep 2023 - Present

- Mentored 50+ students in Computer Science, Engineering, and Interactive Media courses, achieving a 95%+ positive feedback rate.
- Specialized in teaching data structures, web development, OOP, and algorithmic problem-solving, aiding in 10+ projects using **Python**, C++, and **JavaScript** for successful completion.

React.js Developer

CITIES Center for Interacting Urban Networks

Apr 2023 - Present

- Transitioned data retrieval from Google Sheets API to direct fetching from internal repositories, enhancing performance and eliminating rate-limiting bottlenecks.
- Developed interactive and customizable chart components with Google Charts API and Nivo. Achieved a 25% load time reduction for data visualizations through effective memoization.
- Automated dataset versioning and metadata generation for 10 public datasets using YAML and Node.js, enabling researchers to track and access various dataset versions.
- Refactored 40% of codebase for **ESLint** compliance to improve code quality.
- Documented project repositories, improving maintainability and facilitating developer onboarding.

Web Developer

Feb 2023 - May 2023

- Automated MS Word document to HTML conversion with **Python**, slashing blog preparation time by 70%.
- Acted as a liaison between the web development and marketing teams, ensuring weekly publication of 3 blogs.

Projects

NYU T-Shirt App UX Design – https://figmashort.link/pftsNf

Jan 2024

- Designed UX for an NYU T-shirt store app, using **Figma** and **Photoshop** for interface design and prototyping.
- Developed reusable styles and interactive components for improved interface consistency and engagement.

MovieLens 1M Dataset Analysis – https://github.com/RitinDev/Applied-Data-Science Oct 2023 - Dec 2023

- Analyzed the MovieLens 1M dataset with **Pandas**, **Numpy**, **Seaborn** and **Scikit-Learn** to examine the relation between user demographics and movie genre preferences.
- Implemented a OneVsRestClassifier with logistic regression for demographic-based genre predictions.
- Developed an SVD-based collaborative filtering model for personalized movie recommendations.

Project Portfolio – https://github.com/RitinDev/project-portfolio

Jan 2023

- Built a responsive project portfolio with Vite, TypeScript, React and Ant Design.
- Deployed on GitHub Pages with GitHub Actions for **CD** to streamline content updates.
- Boosted search visibility using **SEO** via Google Search Console and React SEO tools.

Busy? – https://github.com/agiledev-students-fall2022/final-project-team-busy

Sep 2022 - Dec 2022

- Developed Busy?, a MERN-based full stack web app for schedule sharing and collaboration.
- Designed UI / UX and a clickable prototype in Figma, implemented with React and Material UI.
- Connected to a MongoDB database with a Node.js / Express back-end, deployed on DigitalOcean.

Technical Skills

- Languages: Python, R, SQL, HTML, CSS, JavaScript, TypeScript, Rust, C/C++, Java, Bash, YAML
- Frameworks and Libraries: React, Material UI, Bootstrap, Ant Design, Node is, Express, MongoDB, MySQL, Jest, Mocha, Chai, Flask, Pandas, Numpy, Scipy, Scikit-Learn, PyTorch, Selenium
- Tools: Git, Linux, Docker, DigitalOcean, Azure, JMeter, NGINX, CI/CD, ESLint, Tableau, Figma, IATEX

Github: RitinDev

LinkedIn: ritin-malhotra