

Education

New York University

May 2024

- B.S. in Computer Science, Minor in Economics | GPA: 3.861 / 4.0
- Honors: NYU Founders' Day Award, Golden Tassel
- Coursework: Quantitative Data Analysis, Applied Machine Learning, Applied Data Science, Database Design, Agile Software Engineering and DevOps, OS, Networks, Data Structures, Algorithms, UX Design

Work Experience

Junior Data Analyst

Norse Atlantic Airways

Jul 2024 - Present

- Directed revenue management and data initiatives, achieving a 30% YoY load factor increase and 37% YoY TRASK growth.
- Developed ideal load factor curves with **Python** and **SQL**. Integrated curves into **AirRM** for dynamic fare adjustments, reducing the risk of fare spoilage and spillage.
- Built and deployed a machine learning model to predict no shows and automatically adjust inventory lids, optimizing revenue from unsold premium capacity and no shows.
- Proposed ATH-LAX route based on demand and competitor analysis, resulting in Norse's most successful route launch to date with 2300+ segments sold in the opening weekend.
- Built a **Python** tool to automatically set tactical fares and open tactical inventory on weak flights to boost sales.

Software Developer

CITIES Center for Interacting Urban Networks

Apr 2023 - Jul 2024

- Developed interactive and customizable chart components with **Google Charts API** and **Nivo**. Reduced load times by 25% through memoization.
- Automated dataset versioning and metadata generation for 10 public datasets using **YAML** and **Node.js**, enabling users to access various dataset versions.
- Transitioned data retrieval from Google Sheets API to internal repositories, reducing load times from 1 second to under 100 milliseconds and eliminating rate-limiting issues.
- Refactored 40% of codebase for **ESLint** compliance to improve code quality.

UNIX Lab Peer Tutor

New York University Abu Dhabi

Sep 2023 - May 2024

- Mentored 50+ students in Data Structures, Algorithms, Web Development and OOP using **Python**, **C++**, and **JavaScript**; achieved 95%+ positive feedback.

Projects

MovieLens 1M Dataset Analysis – <https://github.com/RitinDev/Applied-Data-Science>

- 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>

- 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.

Technical Skills

- Languages: Python, SQL, R, JavaScript, TypeScript, Rust, C++, Java, Bash
- Data & Machine Learning: Pandas, NumPy, PySpark, Apache Spark, Scikit-Learn, PyTorch, Tableau
- Airline Tools: Navitaire Suite (New Skies), AirRM
- Web & Backend Development: React, Material UI, Ant Design, Node.js, Express, Flask, MongoDB, MySQL
- DevOps & Cloud: Git, Docker, Azure, DigitalOcean, CI/CD, Linux, NGINX
- Other: YAML, HTML/CSS, Selenium, ESLint, Figma