

## 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

Business and Data Analyst

Norse Atlantic Airways

Jul 2024 - Present

- Led revenue management and data initiatives that delivered Norse's first operationally profitable Q2, driving a **27%** YoY increase in passenger revenue and a **15%** YoY increase in load factor.
- Built and deployed a no-shows prediction model and premium seat optimization algorithm, boosting average overbooking revenue by **172%** and enabling Norse's first trading days with load factors beyond 100%.
- Deployed a machine learning model to predict final net revenue for active flights, supporting financial projections and enabling more accurate dynamic pricing decisions.
- 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 **React** 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