

## Education

### Boston University

Bachelor of Arts, Computer Science. 3.75

Boston, MA

Relevant Coursework: Systems, Intro to AI, Intro to Data Science, Data Science Applied

May 2025

Deans List x3

## Skills

**Programming Languages:** Python (Pandas, scikit-learn, NumPy, Matplotlib, Seaborn), C, Java, Bash, SwiftUI

**Tools & Environments:** Command Line, Trello, Git, VSCode, Spyder, Xcode, SCC (Shared Clustered Computing)

**Mathematical Expertise:** [rishabsudhir.com/thedatasciencegospel](https://rishabsudhir.com/thedatasciencegospel)

## Experience

### City of Boston - Citywide Analytics Team

Boston, MA

#### Project Lead & Data Scientist

Jan 2024 - May 2024

- Led a data science initiative with **Boston University SPARK!** analyzing the impact of housing remodels and zoning conversions on rental availability, providing actionable insights for the City of Boston
- Processed and analyzed 16 years of data (**≈3,000,000 data points**) using Python, focusing on linear regression, correlation analysis, and geographic heat maps
- [rishabsudhir.com/city-of-boston-unit-loss](https://rishabsudhir.com/city-of-boston-unit-loss)

### Fi Money

Bangalore, India

#### IOS development Intern

Jun 2023 - Aug 2023

- Developed screens for a new user flow, enabling salary deposits from external banks for over **100,000+ users**
- Utilized **MVVM** architecture to enhance code organization and maintainability
- Integrated **GRPC** protobufs to connect the backend to the frontend
- [rishabsudhir.com/ios-internship-fi-money](https://rishabsudhir.com/ios-internship-fi-money)

## PROJECTS

[github.com/Rishab-Sudhir](https://github.com/Rishab-Sudhir) • [rishabsudhir.com](https://rishabsudhir.com)

### Data Science

Analyzing Color Palettes in Romance Films

Jul 2024 - Aug 2024

- Analyzed color palettes in **75 romance films** (1990s–2024) across English, Hindi, and Korean languages, exploring cross-cultural cinematic trends
- Built a custom system for color extraction using **Python**, **FFmpeg**, and **ColorThief**, analyzing **≈15,000,000 colors** for attributes like saturation, brightness, contrast, and color temperature
- Applied **K-Means clustering** and **Gaussian Mixture Modeling (GMM)** to identify dominant color patterns.
- [rishabsudhir.com/the-colors-of-romance](https://rishabsudhir.com/the-colors-of-romance)

Fashion Through Data: Color Extraction from Ghibli Films

Jun 2024 - Jul 2024

- Analyzed **≈ 8,000,000 dominant colors** from Studio Ghibli frames to inspire fashion design
- Built a system to store and analyze colors, leveraging **ColorThief** to identify the top ten colors in each frame and using **multiprocessing** to optimize processing speed, with results stored in CSV format
- Applied **segmentation** and **K-Means clustering with 3D visualizations** to reveal color trends and patterns, which informed the creation of themed outfits
- [rishabsudhir.com/fashion-through-data](https://rishabsudhir.com/fashion-through-data)

### Frontend

May 2023 - Present

iOS Alumni App for Alpha Kappa Psi Business Fraternity

- Built an IOS app using **SwiftUI** to store and filter through alum relations for approx **400+ Students/Alumni**
- Employed a **Firestore** real-time database to update data in real-time through a Google sheet
- Integrated **Firestore Google Sign-In** authentication so that BU emails could be used
- [rishabsudhir.com/akpsi-bu-app](https://rishabsudhir.com/akpsi-bu-app)