Harsh Patel

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Career Objective

To pursue challenging career opportunities in professional engineering environments where my skills and passion will provide value to business operations.

Education

Bachelors of Science, Statistics

University of Illinois Urbana-Champaign, IL

May 2023

GPA: 3.1

Technical Skills

Programming Languages: C++, Java, Python, R

Operating Systems: Linux, Windows

Tools and Technologies: Git, Docker, Visual Studio, Intellij IDEA, PyCharm, Android Studio, Maven, Spring,

JDBC, Javalin, Django, React, JUnit, GDB, Mockito, SQL, Agile

Work Experience

University of Illinois | Urbana-Champaign, IL

Jan '23 - May '23

Research & Development Staff, URES

(Python, PyCharm, NumPy, Pandas, Keras, Sklearn)

Bachelors of Science, Computer Science

Southern New Hampshire University, NH

December 2025

GPA: In Progress

Responsible for developing the LSTM model to analyze historical financial market data and predict future prices. Data included Index funds such as SPY, IBB, XLRE and stocks such as AAPL and MRNA - used MSE as result metric to compare against traditional forecasting models such as SARIMA and GARCH. Concluded that modern statistical models far outpaced traditional models at a 10x-25x factor as recorded using MSE evaluation. (https://github.com/HarshP0818/URES_UIUC)

Academic Projects

• Social Media Blog API (https://github.com/HarshP0818/SocialMediaAPI May '24 - July '24

API backend without front-end to model social media APIs for handling users and messages.

- Design and Architecture: Architected the API backend using Spring Framework, ensuring scalability and maintainability.
- o Implementation: Developed and implemented RESTful APIs for user account management. including user registration, login, profile updates, and deletion.
- Message Management: Created APIs for message creation, updating, deletion, and retrieval, ensuring secure and efficient data handling
- o Security: Implemented authentication and authorization mechanisms using Spring Security to protect user data and API endpoints
- Database Integration: Integrated the application with a relational database using Spring Data JPA, ensuring efficient data storage and retrieval