

MOHAMED KOMSAN

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EDUCATION

Montclair State University — Montclair, NJ

Expected May 2028

- B.S. in Computer Science • GPA: 3.6

Relevant Coursework:

- Python Programming I, Java Programming I & II, Data Structures & Algorithms, Computer Systems, Systems Programming, Software Engineering I.

Math & Physics:

- Pre-Calculus, Applied Calculus I & II, Physics I, Discrete Math, Linear Algebra.

SKILLS

Languages: Python, Java, C, HTML/CSS, Bash/Shell

Frameworks & Libraries: Spring Boot, React, Vite, Streamlit, pandas, Plotly, Matplotlib, Hibernate, JUnit 5, AssertJ

Databases & APIs: SQL, PostgreSQL, SQLite, REST APIs, Yahoo Finance API

Systems: Linux/Unix, POSIX, File I/O

Tools & Platforms: Git/GitHub, Docker, Vercel, Render, Streamlit Cloud

Concepts: Data Structures & Algorithms, Object-Oriented Programming, Design Patterns, RESTful APIs, CRUD, Database Design, Unit Testing, Debugging

AI Tools: Claude Code, ChatGPT, GitHub Copilot

PROJECTS

Loan Decision Simulator | Java, Spring Boot 3, React/Vite, PostgreSQL, Tailwind CSS | [GitHub ↗](#) | [Live Demo ↗](#)

- Architected a full-stack financial decision platform with a framework-independent Java rules engine using the Strategy design pattern, versioned policies, and immutable PostgreSQL audit snapshots with precise BigDecimal calculations.
- Developed RESTful APIs with Spring Boot 3, Flyway database migrations, hibernate validation, and 84 JUnit 5/AssertJ automated tests; containerized the application with Docker and used externalized configuration for deployment flexibility.

Stock Price Tracker Dashboard | Python, Streamlit, Yahoo Finance API, SQLite | [GitHub ↗](#) | [Live Demo ↗](#)

- Built a real-time stock market dashboard with a modular data-access layer, integrating the Yahoo Finance API with 5-minute caching via st.cache_data and a SQLite-backed persistence layer for watchlists across application restarts.
- Engineered interactive Matplotlib visualizations with range-selectable price history and multi-ticker comparison, normalizing up to four stocks to a common baseline for performance analysis; deployed through Streamlit Community Cloud.

Personal & Business Budget Tracker | Python, Streamlit, SQLite, Plotly, pandas | [GitHub ↗](#) | [Live Demo ↗](#)

- Architected a multi-page financial application backed by a normalized SQLite schema with foreign-key constraints, implementing full CRUD operations through parameterized SQL queries and session-state-driven UI management.
- Engineered a SQL-driven analytics layer using GROUP BY and date-range queries to calculate month-over-month financial metrics, powering interactive Plotly category and time-series visualizations for expense analysis and financial trends.

Real Estate Price Tracker (In Progress, Expected Fall 2026) | Python, React, Real Estate Data API

Building a real-estate analytics tool to track neighborhood price trends by calculating median prices, price-per-square-foot, and comparable listings within configurable geographic search radii.

JOB EXPERIENCE

Desk Assistant, Residence Life — Montclair State University

Jan 2025 – Present

- Assist residents with check-ins, key management, and maintenance coordination in a high-traffic residence hall environment.

Summer Conference Desk Assistant — Montclair State University

Summer 2025 – Summer 2026

- Managed front-desk operations, guest verification, and residency coordination for summer conference programs.

Student Office Assistant, Degree Completion Program — Montclair State University

Oct 2024 – Jan 2025

- Supported administrative operations, assisting non-traditional students returning to complete their degrees.

AWARDS

Dean's List — Montclair State University

Fall 2024, Spring 2025, Fall 2025

Earned Dean's List honors in recognition of strong academic performance and commitment to excellence.

The SGA's Non-Traditional and Veteran Scholarship — Montclair State University

Spring 2026

Awarded in recognition of academic achievement, leadership potential, and support for non-traditional and veteran students.