

Hanik Sator

773-704-8411 | haniksator@gmail.com | linkedin.com/in/haniksator | github.com/haniksator

EDUCATION

DePaul University

Bachelor of Science in Computer Science, GPA: 4.0

- Dean's List (7 consecutive quarters, 2023-2025)

Chicago, IL

Nov 2025

EXPERIENCE

Software Engineering Intern

Mar 2025 – Jun 2025

Aubot

Remote

- Designed and implemented data structure exercises in Java and Python, covering AVL trees, threaded binary trees, and balanced BST operations.
- Built automated validation frameworks to evaluate submissions against edge cases, incorrect logic paths, and performance constraints.
- Developed fault-injection scenarios and grading logic to evaluate debugging accuracy and ensure robust automated assessment.
- Added unit test suites and benchmarking scripts to detect regressions and improve exercise reliability across deployments.
- Participated in code reviews and refactored legacy components to improve modularity and maintainability.

Bakery Team Member

Sept 2022 – Present

Whole Foods Market

Chicago, IL

- Maintained performance standards in a high-volume retail environment with strict operational and safety requirements.
- Trained and onboarded new team members on inventory systems, safety compliance, and process standards.

PROJECTS

FreshTrack - Multi-Tenant Inventory Platform | *Python, Django, PostgreSQL, Docker*

- Architected and deployed a multi-user web application on Render with PostgreSQL-backed persistence.
- Implemented user registration, authentication, and session management using Django's auth system.
- Designed role-based access control supporting private and household-shared item visibility.
- Modeled normalized relational schemas for users, households, inventory items, and permission mappings.
- Developed depletion forecasting logic and automated low-stock notifications based on usage data.
- Wrote unit and integration tests validating authentication flows, permission rules, and inventory state transitions.

Stock Exchange Simulator | *Java, OOP, Design Patterns*

- Developed a stock exchange simulation with real-time order book operations and efficient order-matching algorithms.
- Applied Facade, Factory, and Strategy patterns for modular design and extensible architecture.
- Utilized TreeMap for efficient price sorting and matching, ensuring quick access and sorted trades.
- Integrated logging and diagnostic tooling to analyze performance bottlenecks during high-frequency trading simulations.

Remote-Controlled Car | *Python, Raspberry Pi, GPIO, Hardware Sensors*

- Engineered a Raspberry Pi-based vehicle integrating motors, sensors, LEDs, and real-time feedback systems.
- Developed Python motor control algorithms improving responsiveness and speed stability during testing.
- Implemented GPIO-based hardware abstraction enabling reliable sensor and actuator communication.
- Performed iterative debugging and system-level testing to optimize control accuracy and response latency.

TECHNICAL SKILLS

Languages: Python, Java, SQL, C, C++, JavaScript

Backend & Frameworks: Django, Spring Boot, Flask

Databases: PostgreSQL, Oracle SQL, SQLite

Testing & Tools: JUnit, Git, Docker, Linux

Libraries: pandas, NumPy, Matplotlib