Mohammad Pervaiz

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EDUCATION

Queens College, City University of New York   **3.8/4.0 GPA**
Bachelors in Computer Science, Minor in Mathematics   *Expected May 2027*

SKILLS

Languages: Python, Java, C++, JavaScript, TypeScript, SQL, HTML, XML, CSS/SCSS
Frameworks: FastAPI, Express, Node.js, Next.js, React, Tailwind CSS, Bootstrap
Technologies: Kafka, RabbitMQ, PostgreSQL, MongoDB, Redis, Docker, Linux, Bash, Git, IAM, Grafana, Humio

EXPERIENCE

Software Engineering Intern   **Jun. 2025 - Aug. 2025**
Bloomberg L.P.   *New York, NY*

- Architected and deployed a Kafka-based CDC pipeline for 20K+ Bloomberg employees, replacing fragmented systems with a standardized exactly-once solution via Kafka transactions, ensuring consistency and auditability.
- Designed a modular, event-driven architecture with in-memory aggregation, data-diffing, authoritative database accessors, and IAM-authenticated Kafka topics, greatly improving data reliability, compliance, and visibility.
- Optimized for stability with an hourly batch model following existing architecture, ensuring temporal consistency, larger context window for complex data-diffing, with poller logic executing in ~500 ms per batch.
- Developed a 120+ scenario test suite in Docker with unit, integration, and system tests, including monkey-patched simulations for fast business logic testing; achieved 90% coverage on critical workflows and edge cases.

Computer Science Tutor   **Feb. 2025 – Present**
Queens College Learning Commons   *New York, NY*

- Tutored students in Introduction to Programming, Object-Oriented Programming, Discrete Mathematics, and Data Structures and Algorithms, strengthening fundamentals and problem-solving through hands-on guidance.
- Led recurring Data Structures and Algorithms and System Design workshops for ~30 students, creating LeetCode-style problem sets and whiteboard exercises to build interview confidence and practical experience.

Software Engineering Intern   **Jan. 2025 – Jan. 2025**
Morgan Stanley   *New York, NY*

- Updated a Change Execution Validation API tool, adding new fields, removing deprecated ones, and implementing schema validation to ensure compatibility and compliance before legacy API decommissioning.
- Prevented outages by blocking invalid trader payloads, ensuring only complete and valid data was processed.
- Collaborated with compliance teams and wrote unit tests to validate changes in dev before production rollout.

Software Engineering Intern   **Jun. 2024 – Aug. 2024**
Dotdash Meredith   *New York, NY*

- Developed key features for People.com, a site with 15M+ daily views, using XML, SCSS, and JavaScript.
- Integrated a dynamic mini journey carousel into Dotdash Meredith's monorepo, greatly cutting future development time across 40+ brands while preserving full ad script integrity allowing for seamless integration.
- Designed reusable components for the 2024 Olympics, cutting development time for future special events.
- Built and presented to executives an AI demo for daily games, supporting an initiative to boost engagement.

LEADERSHIP

Code For All President   **Jun. 2025 – Present**

- Leading a 2,000+ tech club and organizing events including Hack Knight, a biannual hackathon previously sponsored by Bloomberg, Capital One, and C4 Energy, plus workshops and networking with professionals.

IAC Fellow   **Jun. 2024 – Aug. 2024**

- An immersive leadership program fostering tech innovation through competitive internships, mentorship, and networking. Successfully secured a $15K grant for Let's Get Ready, a NYC nonprofit supporting educational programs for underprivileged students, by presenting a funding proposal to the IAC Foundation Board.