Syed Muhammad Affan

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Education

University of Maryland, College Park — *Aug 2024 - Dec 2025*
M.Eng Software Engineering — CGPA: 3.60

Habib University, Pakistan — *Aug 2017 - Jun 2021*
B.Sc Electrical Engineering — CGPA: 3.43

Experience

JobDiva Inc. — *Jun 2022 – Aug 2024*
Software Development Engineer

- Led and mentored a team of two junior engineers, fostering a collaborative environment and contributing to skill development.
- Contributed to all phases of the software development lifecycle, including design, coding, code reviews, and rigorous testing to maintain project standards.
- Designed and implemented high-performance algorithms in Python and Java, enhancing product capabilities and improving user search experiences by 32%.
- Developed a Java-based recommendation system, significantly increasing the relevance of user search results and driving higher engagement metrics.
- Optimized search functionality by refining algorithms and introducing advanced filters, improving overall system performance and user satisfaction.
- Contributed to implementing Apache Solr for search functionality, reducing search response and improving user satisfaction.
- Collaborated on healthcare feature development, expanding the product's market reach by 25%.
- Integrated security audit-compliant email features, reinforcing product resilience against emerging threats and increasing overall security posture.
- Played a key role in the database migration from Oracle to MySQL, ensuring a smooth transition and reducing downtime.

Lambda Theta (LT) — *May 2021 – Jun 2022*
Software Developer - AI

- Developed and optimized data pipelines for a POS service, ensuring data accuracy and integrity, and integrated a route optimization algorithm that improved logistics efficiency by 20%.
- Engineered a face recognition system using Deep-stream SDK, which reduced security breach detection times.
- Led the development of a cross-platform mobile app using Flutter and Yolov5, improving video-based distance estimation for trucking logistics.
- Built a Minimum Viable Product (MVP) for the trucking industry using computer vision, processing real-time video feeds using Python from CCTV cameras.
- Simulated a hospital robot navigation system using the Heuristic A* algorithm in Java, increasing delivery efficiency.

Skills

- **Programming Languages**: Python, C/C++, Java, Dart, SQL, JavaScript, HTML & CSS
- **Databases**: MySQL, Oracle, PostgreSQL, MongoDB, Firebase Realtime Database
- **Tools & Technologies**: GitLab, GitHub, Flutter, CI/CD, Linux, Secure coding, AWS, Cloud Security, OOP, Data Structures, TensorFlow, YoloV5, J2EE, JSP, Servlet

Projects

DevTrack: Feature Assignment System — *2024*

- Developed a web-based ticketing and feature assignment system to enhance team collaboration, incorporating a secure coding software development lifecycle to ensure product security and resilience against multiple attack vectors.
  Technologies Used: Node.js, React.js, MySql

Slack-Bot — *2022*

- Implemented a chatbot using Django, Slack API, and PostgreSQL, enabling seamless communication via Slack.
  Technologies Used: Django, Slack API, PostgreSQL

TRIPP: An E-Bike Sharing System — *2021*

- Developed a scalable, decentralized e-bike sharing prototype using Firebase for real-time data storage, IoT for monitoring, and Android for seamless authentication.
  Technologies Used: Firebase, IoT, Android, Java

Certification

Cyber Security Specialization from Google — *Nov 2023*

- Completed Google Cybersecurity Certificate program, gaining hands-on experience with industry tools like Python, Linux, SQL, SIEM tools, and Intrusion Detection Systems (IDS). Developed skills in cybersecurity programming, security frameworks, incident detection and response, packet analysis, and leveraging AI to enhance productivity in security tasks

Awards

Employee of the Month (December 2022) - JobDiva — *Jan 2024*

- Recognized as the best employee for exceptional performance, successful production releases, and contributions to improving product quality and efficiency.

100% Grant for Final Year Project - Habib University Sustainability Club — *Dec 2020*

- Provided a green energy and climate-friendly solution that integrated sustainability practices, contributing to significant reductions in environmental impact and promoting sustainable development initiatives.