Shivangi Malik

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SUMMARY

Software Software Engineer, specializing in developing web applications and automation systems (Python, Django, Java, Spring Boot, Appium, Android) to solve complex business challenges. Skilled in converting spec-requirements to real-time products via collaborating with cross-functional stakeholders and delivering optimized solutions. With 3 years of industry experience in running experiments and improving engineering velocity on production products, mentoring and leading development teams and deploying real-time solutions, I am a solution-oriented individuals with the capacity to grow and thrive under pressure.

EXPERIENCE

SanDisk (formerly, Western Digital)

Senior Engineer   *Mar 2024 – Sep 2025*

- Led development of an **Appium–Spring Boot** test framework where a central Spring Boot server triggered Java test suites via APIs to **200+ Android devices** connected across 6 Windows lab machines, validating microSD card compatibility and stability. This distributed setup, built with **OOP and DSA-driven Java** test code and used by cross-functional teams, improved project **scalability by 90%** and cut test turnaround from **3 weeks to 3 days (96% reduction)**.
- Led the Development and Deployment of the SD Express Project in **Python** by consistent **sprint planning** and **code reviews** with my team. I collaborated with stakeholders to align expectations and meet deadlines.
- **Mentored 28 people** in learning to code in **Python** by conducting weekly sessions to improve code quality, debugging and problem solving skills while developing and unit-testing storage products.
- I initiated and hosted a **video podcast series** to broadcast product-related information in an accessible format. As a result, there was a **12% increase** in Employee Engagement and Learning and I was awarded the **Star of the Month May 2025**

SanDisk (formerly, Western Digital)

Software Development Engineer   *Jul 2022 – Mar 2024*

- Built an internal **Django web app** to run user-scenario test cases for USB drives across **300+** Windows, macOS, and Linux OS machines. Integrated **100+ Python** test scripts with the app so users could remotely trigger tests, monitor live status and failures, and download execution reports from a single interface. End-to-end test execution time **reduced by 3x** by centralizing and automating multi-OS test system.
- Received **Night on Town Recognition** in November 2023 for completing development of 350+ Python scripts for USB flash product. Stepped out of my core responsibilities to extending support to cross-functional team with analysis and debugging of production features of pSSD device using Lecroy and Wireshark frameworks thus achieving a crucial product milestone within timeline.

CampK12

Coding Instructor   *Jul 2020 - Feb 2021*

- Taught Game and App Development logic and reasoning to over 50 students of 4-13 years of age using Scratch and MIT tools.
- Explained basic Programming and DSA concepts of Loops, Lists, If-Else Conditions.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, Data Structures, Algorithms, OOPs
Frameworks: React, Django, Flutter, Electron.js, Node.js, Webstorage API, localStorage API
Operating Systems: macOS, Windows, Linux, Android
Developer Tools: Git, VS Code, Visual Studio, Android Studio, PyCharm, IntelliJ, Wing
Business Impact: Stakeholder Communication, Cross-Functional Leadership, Collaborative Learning, Budgeting

EDUCATION

MS Computer Science, University Of Bath   Sep 2025 - Present
B. Tech. Electronics and Communication Engineering, IGDTUW   Aug 2018 - June 2022

PUBLICATIONS

Metaverse: Research Based Analysis and Impact on Economy and Business
IEEE Xplore Publication   *Oct 2022*

- Used SARIMAX and ARIMA time-series forecasting models in Python to predict the performance of Metaverse-based companies using technical indicators and analyzing the data using a graph visualizer.

PROJECTS

World Clock Widget | *npm, Electron.js, JavaScript, HTML, CSS, LocalStorage API*   Jan 2026
- Developed a cross-platform desktop widget using Electron.js with a custom frameless and draggable window.
- Implemented multiple world clocks with 24-hour time format and real-time GMT offset calculation using Intl APIs
- Persisted user-selected timezones across sessions using localStorage

AI plays Snake Game | *Python, Reinforcement Learning*   Jan 2026
- Built a model using pyTorch to train AI agent to play the classic snake game using Deep Q-Network algorithm and plot the results in a graph.

Turn-Based Console Game | *Java, Object Oriented Programming*   Dec 2025
- Developed a console game with increasingly difficult levels to collect rewards and avoid obstacles.
- Implemented bots in the game to chase the user player using the **Greedy Approach**.

Salud: Wellness Web Application | *JavaScript, HTML, CSS, Bootstrap, WebStorage API, EmailJS*   Aug 2021
- Implemented User Registration, Login/ Logout and Password Reset System.
- Implemented Journaling feature - Read old journals, Write new entry and Edit old entries.
- Implemented Dark/ Light Theme, Profile Update features.

ACHIEVEMENTS

Campus Leader, Google Developers Group Campus Chapter   Present
Started the GDG On-Campus Chapter and hosted multiple technical workshops for CS students.

Postgraduate Representative, Women In Tech   2025

Recipient of University of Bath Merit Scholarship   2025
Scholarship is awarded to a selected few candidates based on academic excellence and a strong overall application.