Sarthak Gupta

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GitHub: https://github.com/SarthakGupta2912

Education

- **Master of Computer Applications (MCA)** — Panjab University
- **Bachelor of Computer Applications (BCA)** — Rayat Bahra University

Professional Summary

Results-driven Software Developer skilled in architecting and delivering scalable, user-centric applications across mobile, web, and gaming platforms. Expert in Java and C# frameworks leveraging Android Studio, Flutter, and Unity. Independently manage full project lifecycles—requirements, design, implementation, testing, and deployment—while collaborating with UX designers, backend engineers, and QA teams. Notable projects include a Java shopping cart with MySQL and OTP validation, interactive Unity experiences, and AI-powered mobile apps integrating ChatGPT APIs. Achievements include reducing load times by 30%, memory usage by 25%, and transaction failures by 20%. Advocate for modular design, comprehensive unit tests, robust error handling, and Agile methodologies.

Skills

- Programming Languages: C/C++, Java, C#
- Mobile & Web Development: Android/iOS, Flutter, Firebase, RESTful APIs, Payment Integration
- Game Development: Unity (C#)
- Publishing apps (Android/iOS)

Work Experience

BigVision Software Services Pvt Ltd — Software Developer (Feb 2024 – Present)

- Led Flutter front-end development and owned UI/UX architecture; partnered with Node.js/PHP teams to streamline full-stack integration, accelerating feature rollouts by 25%.
- Architected and implemented RESTful APIs, optimizing data serialization and endpoints to cut latency by 30% and boost throughput.
- Integrated OpenAI ChatGPT APIs to power advanced conversational AI/NLP features, driving a 15% increase in user engagement with AI-driven functions.
- Implemented a simple Stripe SDK payment system for secure transactions, reducing payment failures by 20%.
- Optimized performance via lazy loading, intelligent caching, and code profiling—achieving ~30% faster load times and 25% lower memory usage—and refactored the codebase into a modular widget library to cut duplication by 40%.
- Built robust error handling and offline support (retry logic, local caching, fallback screens), slashing crash incidents by 90%, and championed unit testing, code reviews, and Agile processes to elevate code quality and speed issue resolution.

- Published polished Android and iOS applications to Google Play Store and Apple App Store, adhering to platform guidelines and optimizing release workflows.
- Additionally, I managed and maintained large, existing codebases created by previous teams, /developers ensuring continuity, code quality, and scalability.

Immersive Vision Pvt Ltd — Game Developer Intern (Feb 2022 – Jul 2022)
- Developed immersive virtual environments by implementing gameplay mechanics in Unity.
- Optimized game performance to ensure smooth functionality across platforms.
- Collaborated with artists and sound designers to create cohesive and engaging virtual experiences.
- Integrated camera-control logic using cinemachine for dynamic following, damping adjustments, and scripted cutscenes, enhancing player immersion.
- Programmed interactive world mechanics (doors, switches, traps) with event-driven C# scripts and UnityEvent callbacks to decouple logic and designer workflows.
- Implemented object pooling to reuse frequently spawned GameObjects (e.g., projectiles, effects) through pre-instantiated pools, minimizing Instantiate/Destroy calls and reducing runtime allocations and garbage-collection overhead for smoother, more efficient gameplay.
- Leveraged Unity's AnimationEvent system to invoke C# callbacks at specific frames—pausing animations and triggering gameplay actions (such as state transitions or effects) in precise sync with the animation timeline

K12 Techno Services — Game Developer Intern (Aug 2021 – Oct 2021)
- Contributed to the development of educational games by coding game logic and optimizing performance.
- Implemented gameplay features in collaboration with the design team to ensure an engaging user experience.
- Enhanced proficiency in C# and Unity through hands-on development work.

Projects
Shopping Cart (Java, MySQL, JDBC)
- Developed a software application enabling users to order products, receive updates, and validate transactions via OTP using a GSM modem.
- Demonstrated proficiency in Java programming and database management by implementing custom OTP validation for secure transactions.
- GitHub: https://github.com/SarthakGupta2912/ShoppingCart

Disk Scheduling App (Unity, C#)
- Created an educational Unity app to teach disk scheduling algorithms (FCFS, C-SCAN, etc.).
- Demonstrated expertise in the Unity engine and C# by developing interactive learning tools. GitHub: https://github.com/SarthakGupta2912/Disk-Scheduling-Algorithms-OS-Unity

Other Projects
- Additional Android and Unity development projects available on GitHub.